September 13, 1930 Vol. LXXVIII, No. 11

Textile World

Published every Saturday by Bragdon, Lord & Nagle Company,
Division of McGraw-Hill Publishing Company, Inc., New York
Editor: Douglas G. Woolf

The Brief on Depreciation

IN this issue we print an abstract of the brief on the proposed standardization of depreciation rates for the cotton textile industry, submitted to the Bureau of Internal Revenue by representatives of The Cotton-Textile Institute.

On the theory that cases on which decision is pending should not be "tried" in the press, we shall not comment on the controversial issues involved.

There are, however, certain broad phases which deserve emphasis.

•

In the first place, even a casual reading of this brief will furnish an additional, and exceptionally strong, argument for the type of coordinated effort which the textile industry, in its various branches, is developing. Without organized cooperative machinery, it would have been possible to present to the Bureau nothing better than a desultory collection of evidence, based largely upon opinion, in place of the coherent, logical argument, based upon fact, submitted by the Institute. The facilities of that organization permitted it to enlist the combined knowledge of manufacturers throughout the country, and of men who produce the cotton textile machinery.

Proof of the value of cooperation has been furnished in past years by the excellent briefs on tariff, taxation, transportation rates, and other matters, prepared by the various textile associations. The depreciation brief, developed by an organization representing the industry in all parts of the country, adds immeasurably to this evidence.

Whether the industry wins or loses, it can be satisfied that its case was presented in the best possible way.

•

Nor is this brief of importance merely in connection with the Bureau of Internal Revenue matter. It contains material, of both a fundamental and a specific character, which every cotton mill in the country can apply to its individual depreciation and obsolescence problem. Furthermore, its interest is not restricted to cotton mills. Manufacturers in every division of the textile industry are concerned with the principles set down.

•

Finally, the brief furnishes irrefutable evidence of two points which have been emphasized continually in these columns during recent months: (1) the noteworthy improvements made in textile machinery in the last few years; and (2) the necessity of constant modernization if mills are to survive the present-day competition.

The summary of mechanical developments, presented in the third section of the argument of the brief, is impressive. Its significance is obvious.

In this case, a brief—ordinarily interpreted as meaning a drier-than-dust legal document—yields stirring business romance.

The Week in Textiles

Cottons Statistically Better . . .

COTTON GOODS production during August amounted to 218,815,000 yd., or at the rate of 43,763,000 yd. per week. This was 29% less than August, 1929, when the rate was 61,508,800 yd. per week. . . . . Sales during August were 235,272,000 yd., or 107.6% of production. Shipments during the month were 231,348,000 yd., or 105.7% of production. Stocks on hand at the end of the month were 442,996,000 yd., a decrease of 2.8% during the month. Unfilled orders on August 31 were 226,422,000 yd., an increase of 1.8% during the month. . . . . Although the August rate of production was 5% more than July (which has always been the lowest of each year), it was substantially less than any other month for the period in which comparable statistics have been issued through the Association of Cotton Textile Merchants, i.e., since January, 1928. Stocks at the end of August were about 4% less than on Jan. 1, 1930.

As to Women's Wear . . .

A QUESTIONNAIRE sent by Botany Worsted Mills to 2,343 firms asking for opinion on most satisfactory date for opening of spring, 1931, women's wear lines, has brought results as follows in percentage: September, 18%; October, 34%; November, 31%; December, 8%; January, 4%; February, 2%. . . . . "We infer from this that a fixed opening date would work a hardship and create a set program undesirable under present conditions," says the Botany Worsted Mills. "It is evident that more satisfactory results could be attained by additions made to lines over a period covering the next two months, putting outlets in a position to operate as their own plans dictate."

The Business Outlook

"The marked lull in business activity this year at the end of August and the beginning of September has been followed by a general freshening of business sentiment as signs of seasonal improvement accumulate. Lengthened plant holidays and deferred check payments in the fortnight including Labor Day, dropped our index to 83.5% of normal despite evidence that business recovery, beginning as usual with the basic industries and primary distribution, is proceeding normally in response to seasonal stimulus. . . . . Coal and electric power production are increasing, steel output is being maintained, carloadings are rising. Expansion of commercial loans and currency circulation indicate a rising volume of wholesale and retail trade as the fall buying movement gets under way. Business is beginning to feel better than it looks, but is still stymied by undue caution in making forward commitments."

—The Business Week

The Textile Outlook

Textile business is a shade better in many branches but the question whether this is merely seasonal or whether it is a fundamental turn out of the depression remains unanswered. . . . Recent Government cotton crop estimate of 14,340,000 bales gave futures a setback but the goods market withstood the shock and though trading slackened, prices held with only minor changes. The statistical position is encouraging. . . . Wool goods sellers are working on current fall and little will be done toward next spring till late in September. Low stocks are said to presage a pinch in fall goods of the wanted sorts. . . . Improvement is reported in knit goods with outerwear moving well. Hosiery is steady but Christmas buying is backward. Underwear meets better call. . . . Raw silk has turned weak again but silk products are not much changed. Broad silks expected to pick up soon.

The Argentine Revolt . . .

IF REVOLT sweeps Argentina it carries with it far-reaching implications as to the stability of other Latin American countries. Without question Argentina has more inherent stability than any other country south of the Rio Grande. . . . . Those whom the insurrection has brought into power are more friendly to the United States than the administration thrown out of office, although the Irigoyen policy was more Nationalistic than it was anti-American. . . . . It is doubted that there will be any material interference with the production and marketing of Argentine products, so that the effect on world trade will be confined to the uncertainties of the next few weeks. Perhaps later American textiles may meet greater favor in Buenos Aires than hitherto.

Plan Bombay Mill Merger . . .

MERGER ALONG the lines of the Lancashire Cotton Corp. is planned by a group of Bombay cotton spinning and weaving firms under guidance of Sir Ness Wadia. C. C. Entwistle of Airey Entwistle Co., Manchester, is leaving England next week for India to carry on the work of appraisal. . . . . Indian merger is not to fight Lancashire but the Japanese industry which now uses Indian cotton and undersells Bombay mills on fabric in their own field. . . . . The Lancashire

Cotton Corp. is now producing coarse yarns at very low prices which weavers believe can be successfully used in fabrics for the Far Eastern markets. A proposed regional town planning scheme in Lancashire is construed as indicating end of local jealousies and collaboration for benefit of majority.

Cotton Printing Gains . . .

ACTIVITY IN the cotton fabric finishing industry for August as reported by the National Association of Finishers of Cotton Fabrics was on the same generally low plane as July except for a tangible improvement in printing. . . . . Percentages of activity follow: White and dyed, 37% both months; logwood black, 31% both months; fast black, 17% in August, 15% in July; prints, 41% in August, 31% in July. . . . . The latest figures range from 8 to 44% below the levels reported for August, 1929.

To Form Tape Association . . .

REPRESENTATIVES OF approximately 80% of tape manufacturing trade will meet Oct. 2, at the Roosevelt Hotel, New York, to consider plans for formation of a national organization. . . . . Announcement to this effect has been made by C. Marlin Bell, managing director, Philadelphia Textile Manufacturers' Association, who has taken a prominent part in preliminary discussions.

Shrinkage in Knit Goods Business . . .

EFFECT OF the business depression on the demand for hosiery and underwear, the two chief units of the knit goods trade, is shown in current figures made public by the Department of Commerce. Hosiery shipments for July totalled 3,193,149 doz. pairs against 4,372,394 doz. pairs the same month last year. This was paralleled in underwear, July shipments totalling 806,666 doz. against 1,086,271 in July, 1929. Drop in sales has been partially balanced by curtailment. . . . . In all the chief underwear divisions, end-of-month stocks for July, 1930, were above July, 1929, the heaviest percentage being in men's shirts and drawers, which lately totalled 405,073 against 349,499 in July, 1929.

Models from Pacific Mills style showing in connection with opening this week. At left: one piece sports pajamas of cotton crepe. At right: a new vogue—the little frock—in a black and white print.

Cloth Stationery . . .

USE OF COTTON cloth for office stationery is developing increased interest. Many firms, identified with the cotton trade, are either adopting, or experimenting with this use. . . . . Back-filled print cloth is being used for the purpose. . . . . While this business has not run to large volume as yet, and while the possible obstacles in the way of general acceptance are apparent, its use by cotton mills, cotton machinery firms, raw cotton trade, etc., is in itself an important possibility. In addition, its use for permanent office records is attractive. . . . . Opinions differ on comparative cost between paper and cloth, although certain printers state that prices on latter compare favorably with those on high-grade bond paper.

Tariff Commission . . .

TARIFF COMMISSION appointments were a recent feature of Washington news. President Hoover has appointed Henry P. Fletcher of Pennsylvania as chairman of the reorganized commission. His experience in diplomacy and foreign affairs will stand him in good stead. . . . . Thomas Walker Page, a Democrat from Virginia, has been appointed to the Commission. Mr. Page has been on that before in 1911-12 and 1918-22. He has lately spent much time on taxation matters.

Pushing Cotton Bags . . .

MORE EXTENSIVE use of cotton bags for packaging potatoes, fruit and nuts is urged in a study made by the New Uses Section of The Cotton-Textile Institute and summarized in a pamphlet just issued. . . . . There is a trend toward retail packaging of foodstuffs in cotton bags, sales of the latter in 1929 being reported as five times as large as in 1928. This bagging offers opportunity for distinctive branding of the product. . . . . If 10% of the market in potatoes were to be exploited it would result in added annual consumption of 30,000,000 sq.yd. of narrow sheetings. Special fabrics may well be developed, such as open mesh bagging for fruit and nuts.

Buy-a-Bale Movement . . .

GOVERNOR DAN MOODY, of Texas, desiring to strengthen and stabilize the season's cotton prices, has launched a drive to induce citizens of the cotton growing States to purchase 5,000,000 bales at $75 each and to store their purchases indefinitely. . . . . It is admitted that the rush of sales during the picking season results in a "buyers' market" and if the crisis at that time can be passed it is likely that cotton prices will be stabilized. . . . . The success of this movement rests upon uniform support in every cotton-producing State and upon the effective operation of State and local committees charged with promotion of the plan.

Standardized Depreciation Rates *for Cotton Textile Industry* Held Impracticable

I. It is wholly impracticable to apply standardized rates of depreciation to the cotton textile industry and any attempt to do so would produce highly inequitable results.

II. Even if it be assumed that a standardization of cotton textile depreciation rates would be practicable, the rates proposed in the tentative bulletin of the Bureau of Internal Revenue are wholly inadequate, entirely irrespective of the factor of obsolescence.

III. Obsolescence is a factor of continually increasing importance in the cotton textile industry, which must be allowed for as part of the depreciation rates of cotton textile mills, and the failure to make any such allowance constitutes a fatal defect in the Bureau's tentative bulletin.

THE above conclusions are reached in a brief submitted this week to the Bureau of Internal Revenue, United States Treasury Department, by representatives of The Cotton-Textile Institute, on behalf of the Institute, in the matter of proposed standardized depreciation rates, for tax purposes, for the cotton textile industry.

Permission to submit such a brief was granted at a conference held at Washington, May 23, 1930, between representatives of the Treasury Department, of the Institute and of certain of its member mills, and of the National Association of Finishers of Cotton Fabrics. That conference, in turn, was arranged pursuant to the request of the Institute made at an informal conference with representatives of Bureau in Washington Dec. 3, 1929, at which representatives of Institute protested against the promulgation, by the Bureau, of standardized depreciation rates for the cotton textile industry.

History of the Matter

A little of the history of the matter, as set down in the brief, is essential to a proper understanding of the arguments advanced by the Institute:

In June, 1928, the Institute was approached by representatives of the Bureau of Internal Revenue, who stated that they were making a study of depreciation, and was requested by them for information on depreciation rates employed in the cotton textile industry. The Institute did not have such information available, and so advised the Bureau's representatives. It was indicated by the representatives of the Bureau that studies of depreciation rates for various industries were to be carried out in cooperation with trade associations representing the industries concerned, and, with a view to considering what action should be taken by the Institute with respect to such cooperation, a Depreciation Committee was appointed. Later, however, this plan of cooperative studies was apparently discarded by the Bureau and it was not until some months later that the Institute learned that the Bureau was carrying out independent depreciation studies and proposed, as a result of such studies, to formulate schedules of standardized depreciation rates applicable to various industries.

It came to the Institute's attention in October, 1929, that a tentative schedule of standardized depreciation rates for the cotton textile industry had been prepared by the Bureau; and the Institute thereupon requested an opportunity to be heard with regard to the matter of standardized rates. Accordingly, the conference of Dec. 3, 1929, previously referred to, was arranged. At this conference, the representatives of the Institute confined themselves to a discussion of the one major question, which, as we see it, is here involved; *viz.*, whether or not, under the conditions prevailing in the cotton textile industry, it is practicable to standardize depreciation rates, and if practicable, whether such standardized rates would operate equitably. The representatives of the Institute argued that no such policy of standardization was practicable, and that the result of putting such a policy into effect would operate most inequitably and would involve a complete reversal of the Bureau's previous policy. At the conclusion of the conference, the representatives of the Institute were furnished with copies of a tentative Bureau bulletin purporting to prescribe standard depreciation rates for the cotton textile industry, and were advised that the Institute would be afforded a further hearing at a later date at which it might present its contentions respecting the tentative bulletin and the policy involved therein.

Following the conference of Dec. 3, 1929, the Institute proceeded to assemble, in large part by means of a questionnaire to the mills, data on the subject of depreciation.

Pursuant to the arrangement made at the conference of Dec. 3, 1929, a hearing was arranged for May 23, 1930, to afford the Institute an opportunity to present the data which it had collected and its contentions as to depreciation and obsolescence. The hearing was participated in by representatives of the Bureau and of the Institute and certain of its member mills, and also by representatives of the Cotton Finishers Association, the members of which are directly interested in the proposed standardized rates for the cotton textile industry. There were also present at the conference representatives of the National Coal Association and of the National Association of Manufacturers, both of which associations are interested in the question of standardized depreciation rates generally, and have expressed themselves as opposed to the proposed policy of standardization.

Questions Involved

The major questions discussed at the conference and in this brief, are:

(*a*) Whether it is practicable and, whether if practicable, it is equitable, to develop standardized depreciation rates for the cotton textile industry;

(*b*) whether, assuming that standardized rates are to be promulgated, the rates proposed by the Bureau in its tentive bulletin are adequate, quite irrespective of the factor of obsolescence; and

(*c*) to what extent the factor of obsolescence is presently and continuously operating in the cotton textile industry, and the extent to which the continued operation of this factor is predictable.

Evidence Presented

In addition to documentary evidence presented at the hearing, oral statements included those of:

R. E. Henry, president, Dunean and Watts Mills, Greenville, S. C., and chairman of the Depreciation Committee of the Institute; Sydney P. Munroe, manager of Cost Section of the Institute; J. E. Sirrine, head of J. E. Sirrine & Co., Greenville, S. C.; J. M. Barnes, head of the Barnes Textile Service, Boston, Mass.; L. C. Dodge, C. P. A., Spartanburg, S. C., representing thirteen southern mills; A. A. Drake, secretary and treasurer of the Bibb Mfg. Co., Macon, Ga.; G. V. Meehan, assistant treasurer of the Warren Mfg. Co., Warren, R. I., and auditor of the Grosvenor-Dale Co., North Grosvenor Dale, Conn.; E. Kent Swift, treasurer and general manager of the Whitin Machine Works, Whitinsville, Mass.; R. A. Kettley, treasurer of the Saco-Lowell Shops, Boston, Mass.; C. F. Butterworth, treasurer of the Draper Corp., Hopedale, Mass.; Albert Palmer, research expert of the Crompton & Knowles Loom Works. In addition to the statements of these witnesses on behalf of the Institute, a statement was made on behalf of the Cotton Finishers Association by Grant A. McClatchie, secretary of the United States Finishing Co. and chairman of the Depreciation Committee of that association.

Machinery Improvements

"There have been more improvements in the field of textile machinery in the last ten years than in the thirty years previous, and more in the last two years than in the previous ten."—*From the Institute's depreciation brief.*

Standardized Rates of Depreciation Impracticable

THE body of the brief consists of the argument, divided into three parts, covering the three questions involved as outlined previously. The following abstract of this argument presents the high lights, and does not include the many and comprehensive references to existing literature on the subject and to the stenographic transcript of the proceedings at the May 23 conference, which are contained in the brief itself.

Maintaining that it is wholly impracticable to apply standardized rates of depreciation to the cotton textile industry, and that any attempt to do so would produce highly inequitable results, the Institute's brief states:

1. *Standardization of depreciation rates is not contemplated by the law or regulations and is generally recognized to be impracticable.*

Section 23 (k) of the Revenue Act of 1928 authorizes as a deduction in determining taxable net income "a *reasonable* allowance for the exhaustion, wear and tear of property used in the trade or business, including a *reasonable* allowance for obsolescence." (Italics ours.) In the nature of the case, what is a *reasonable* allowance must be determined in the light of the particular circumstances of each taxpayer, and may well vary not only as between one taxpayer and another for a given year, but as between one year and another in the case of the same taxpayer.

The decisions of the Courts and of the Board of Tax Appeals indicate clearly that depreciation rates must be worked out in the light of the particular circumstances of each taxpayer's situation.

The Board of Tax Appeals has repeatedly recognized the same principle.

From the enactment of the original income tax law up to the present time, the Treasury Department has consistently refrained from any attempt to fix depreciation rates for taxpayers in any industry, and has dealt with the question of the amount of depreciation allowable to each particular taxpayer only upon the audit of the return of that taxpayer, giving consideration in dealing with that question to the particular circumstances of each taxpayer, and determining the amount of depreciation on the flexible basis of the reasonable allowance contemplated by the law and regulations covering the matter.

The soundness of the past practice of the Bureau with regard to depreciation is confirmed not only by the statute and the regulations, but by sound accounting practice, which has been repeatedly recognized as important in determining net income for tax purposes.

The experience of the Interstate Commerce Commission is of interest in this connection. Under the provisions of the original Interstate Commerce Act, the Commission was given power to prescribe accounting methods for interstate carriers. It was sought to have the Commission prescribe depreciation rates for equipment to be applied by all carriers. This the Commission refused to do, saying *(I. C. C. Accounting Bulletin No. 1,* p. 32, Case 109):

"Conditions under which equipment is used vary so greatly that no uniform rate of depreciation for all roads could be reasonably determined. The proper rate will, of course, vary inversely with the life of the property to which it pertains, and its determination must take into consideration whatever affects the life of the property. Each reporting officer should determine the rate to be used according to such experience tables as he may be able to construct from equipment records."

It thus appears that the statute itself, the Bureau's own regulations, the decisions of the courts, the unanimous opinion of accountants, and the experience of the Interstate Commerce Commission, all bear out the proposition that no standardized system of depreciation rates will be practicable and operate equitably.

2. *Standardization of depreciation rates in the cotton textile industry is peculiarly impracticable and would operate with especial inequity on account of the wide variation of conditions within the industry.*

The statements presented at the conference of May 23, 1930, clearly brought out the wide variation within the cotton textile industry of conditions affecting depreciation rates.

This evidence showed that the depreciation of buildings and machinery is affected by climatic conditions; by the character of the raw cotton used; by the character of the product manufactured; by the speed at which the machines are operated, which may vary either because of differences in the type of product manufactured or because of differences in the policy of the management; by the ability and efficiency of the management; by the policy of the management with regard to keeping buildings and machinery in repair; by the manner in which machinery is driven, whether by shaft-drive or individual motors; and by the quality of the labor available. The applicable rate of depreciation differs as between the various machines in a single mill, and even more clearly must differ as between different mills. Moreover, where a mill has been sold as a going concern, the depreciable property of that mill must, after the sale, carry a very different depreciation rate than similar property of like characteristics in other mills. The statements at the hearing stressed the impracticability of standardizing

depreciation rates in an industry with such varying conditions as the cotton textile industry.

The concrete effects of the varying conditions in the industry on depreciation rates were brought out by a discussion of the data obtained through the Institute's questionnaire.

The replies to the questionnaire were analyzed so as to afford a comparison of depreciation rates and estimated useful lives of the depreciable property of the mills as between (*a*) northern and southern mills; (*b*) carded and combed mills; (*c*) mills using high-grade, average-grade, and low-grade cotton, respectively; and (*d*) mills operating single-shift, double-shift, and 24 hours. The replies were also analyzed to show the range and extent of actual variations in depreciation rates and in the estimated useful lives of buildings and machinery.

(*a*) The comparison of northern and southern mills shows a definite difference in the useful lives of both buildings and machinery. The comparative average estimates of useful life in years are as follows:

Kind of Property	*North*	*South*
Mill construction buildings	51 yrs.	41 yrs.
Frame mill buildings	32	25
Frame tenements	33	24
Opening machinery	22	20
Picking machinery	22	21
Carding machinery	24	22
Spinning machinery	23	22
Weaving machinery	23	21

(*b*) A comparison between mills making carded products and mills making combed products also shows definite and consistent variations. Here there is no consistent difference as to the useful life of buildings, but the average useful life of machinery differs as follows:

Kind of Machinery	*Carded Mills*	*Combed Mills*
Opening machinery	20 yrs.	22 yrs.
Picking machinery	20	22
Carding machinery	22	24
Spinning machinery	22	23
Weaving machinery	21	23

(*c*) Turning now to a comparison of the useful life of machinery in mills using respectively high-grade, average-grade, and low-grade cotton, definite and consistent variations again appear. The comparative average estimates of useful life are as follows:

Kind of Machinery	*High-Grade Cotton*	*Average-Grade Cotton*	*Low-Grade Cotton*
Opening machinery	23 yrs.	20 yrs.	23 yrs.
Picking machinery	23	20	23
Carding machinery	24	22	24
Spinning machinery	23	22	25
Weaving machinery	23	21	23

(*d*) The replies to the questionnaire also show a definite and consistent variation in useful life resulting from overtime operation. The average estimated useful life for single-shift, double-shift and 24-hour operation is as follows:

Kind of Property	*Single Shift*	*Double Shift*	*24-Hour*
Fireproof buildings	50 yrs.	43 yrs.	
Mill construction buildings..	43	38	
Frame mill buildings.....	26	22	
Power plant*	20	15	13 yrs.
Opening and picking machinery	21	15	13
Carding machinery	22	15	15
Combing machinery	21	15	12
Spinning machinery	22	15	15
Weaving machinery	21	15	13

*Average of life for boilers and accessories and for steam engines.

(*c*) Finally, the questionnaire clearly brings out the wide variation of depreciation rates and estimates of useful life as between the mills. Since these estimates represent the considered judgments of expert mill operators managing practically 50% of the cotton textile industry of the country, they cannot be lightly disregarded, and must be taken as showing very real and very wide variations in conditions among the mills. Any attempt to force all the mills to use a single arbitrary standard rate of depreciation could not operate equitably, and would prove, we submit, to be wholly impracticable.

Rates Named by Bureau Are Wholly Inadequate

THE second part of the argument in the Institute's brief contends that, even if it be proved that a standardization of cotton textile depreciation rates would be practicable, the rates proposed in the Bureau's tentative bulletin are wholly inadequate, entirely irrespective of the factor of obsolescence. An abstract of the argument on this point follows:

1. *The depreciation rates proposed in the Bureau's tentative bulletin are much too low, as shown by the experience of the industry, the previous practice of the Bureau, and the decisions of the Board of Tax Appeals.*

The Bureau's tentative bulletin proposes rates which, with the corresponding useful life of the property in years, are as follows:

Kind of Property	*Rate*	*Useful Life*
Brick tenements and mill buildings	2%	50 yrs.
Frame tenements and mill buildings	4%	25
Preparatory, spinning and weaving machinery	3%	33⅓
Power plant, heating and sprinkler systems, and electrical equipment	Not over 5%	Not less than 20
Bleaching and dyeing machinery and equipment	5%	20

These rates are based on weekly operation of from 48 to 55 hours. Overtime is to be allowed for at the rate of 0.1% for each 10% of overtime, or not to exceed 1% for 100% overtime. In the event that a mill does not segregate machinery from power plant, electrical equipment, etc., in its accounts, it is to be allowed a composite rate, exclusive of overtime, of 3.5%.

Turning to a detailed consideration of the inadequacy of the rates proposed in the Bureau's tentative bulletin:

(*a*) The proposed rates on buildings are 2% for brick construction, corresponding to a useful life of 50 years; and 4% on frame construction, corresponding to a useful life of 25 years. Taking first the case of brick buildings, the proposed rate is somewhat lower than the average—2.33%—corresponding to a useful life of 43 years, of the rates heretofore used by the mills and accepted by the Bureau. It corresponds very closely to the average—1.97%—of the rates heretofore used by the northern mills, but is substantially less than the average—2.49%—of the rates used by the southern mills. In the case of frame mill buildings, the proposed rate is slightly higher than the average—3.49%—of the rates used by the mills, but in the case of tenements the proposed rate is slightly lower; and in either case is substantially lower than the rate of 5% which was allowed by the Board of Tax Appeals in *Sanford Cotton Mills,* 14 B. T. A. 1210, and *Roanoke Mills,* 18 B. T. A. 474. The most serious difficulty with the proposed depreciation rates on buildings, however, is the failure to allow additional depreciation for overtime operation.

(*b*) The proposed rate on preparatory, spinning and weaving machinery, exclusive of overtime, is 3%, corresponding to a normal useful life of 33⅓ years. Such machinery makes up from 80% to 90% of all the machinery in a cotton mill, and the correct determination of the rate of depreciation applicable thereto is thus of vital importance. It is with regard to such machinery that the rates proposed by the Bureau are most startlingly inadequate. Considering first the question of rates allowed in the past, we find that the average rate on machinery for all the mills for single-shift operation has been 4.81%, corresponding to a

useful life of approximately 21 years. The average estimates of useful life have been:

Kind of Machinery	*Life*
Opening machinery	21 yrs.
Picking machinery	21 yrs.
Carding machinery	22 yrs.
Combing machinery	21 yrs.
Spinning machinery	22 yrs.
Weaving machinery	21 yrs.

This indicates an average rate for preparatory, spinning and weaving machinery of 4.7%, as against the 3% proposed by the Bureau. The average useful lives will of course vary, dependent on whether the mills taken are northern or southern, carded or combed, use high-grade, average-grade or low-grade cotton, etc.; but the range of variation in the corresponding average rates is from about 4.8% to about 4.25%, the average in all cases being much higher than the flat 3% rate proposed by the Bureau.

(*c*) The tentative bulletin proposes a rate on power plant, heating and sprinkler systems, and electrical equipment of not to exceed 5%, corresponding to a minimum useful life of not less than 20 years for single-shift operation. This is substantially less than the averages of the rates which have been claimed and allowed in the past on such equipment, which have been as follows:

Equipment	*Average Rate*
Power plant	6.07%
Heating plant	5.55%
Electrical equipment	7.28%

The past rates thus indicate a general average rate of 6.3%, rather than a maximum rate of 5%. The average of the estimates of useful lives of such equipment, with the corresponding depreciation rates, are as follows:

Equipment	*Life*	*Rate*
Power plant	20 yrs.	5.00%
Heating plant	19	5.26%
Electrical equipment	18	5.55%

The estimates of useful life thus indicate a general average rate of 5.27% instead of a maximum rate of 5%.

(*d*) The proposed rate on bleaching and dyeing machinery and equipment is 5%, corresponding to a useful life of 20 years. The question of the adequacy of such a rate was discussed at the hearing by the representative of the Cotton Finishers Association, and will be elaborated in the brief to be filed herein on behalf of that association. In this brief, therefore, we shall merely point out that the average rates allowed the cotton textile mills in the past on finishing equipment have been 7.3% in the case of wet finishing machinery, 7.5% in the case of dry finishing machinery, and 7.35 % in the case of dyeing machinery, clearly indicating that the rate of 5% proposed by the Bureau is wholly insufficient.

(*e*) The tentative bulletin proposes a composite rate of 3½% on all machinery for mills which do not in their accounts segregate power plant, etc., from preparatory, spinning and weaving machinery. Here again the rate proposed is wholly inadequate, as measured by the rates worked out by the mills in the past and agreed to by the Bureau. The average composite rate on machinery and power plant used by 100 mills representing 7,788,398 spindles (over 25% of the operating spindles in the United States) is 4.65%—over 32% higher than the proposed rate. Moreover, the experts who made statements at the hearing all agreed that the proposed composite rate of 3½% was far too low.

(*f*) One of the most serious inadequacies of the tentative bulletin is in its method of dealing with overtime depreciation. The only statement which the bulletin contains with regard to the matter of overtime is as follows:

"The rate of 3% fixed on textile machinery is to apply as a basic rate where machinery is operated at a normal weekly rate of 48 to 55 hours. To this rate there may be added for overtime, not to exceed 1/10th of 1% for each 10% of overtime or not to exceed a total of 1% for 100% overtime."

It will be observed that the tentative bulletin makes no provision for overtime depreciation on buildings, power plant or finishing machinery, that it limits overtime depreciation of mill machinery generally to an additional 1% for double-shift operation; and that it makes no further provision for 24-hour operation.

The failure to provide for overtime depreciation on buildings entirely loses sight of the fact that the principal cause for the depreciation of mill buildings is vibration, which is increasingly operative as the mill is run longer hours. The operation of this factor is brought out in the averages of the estimates by the mills of the useful life of mill buildings.

Type of Construction	*Single Shift*	*Double Shift*
Brick mill buildings	50 yrs.	43 yrs.
Mill construction buildings	43	38
Frame mill buildings	26	22

Coming now to the question of machinery, accounting authorities generally are agreed that a substantial additional allowance for overtime depreciation is called for in the case of double-shift operation. In addition to the increase in actual wear and tear due to running machinery double the number of hours, there is the further factor of insufficient maintenance.

It is the consensus of opinion among the authorities on the subject that the additional depreciation allowance in the case of double-shift operation should be at least 50% of the normal rate.

The generally accepted rule thus is that the depreciation rate for double-shift operation should be 150% of the rate for single-shift operation. The Bureau's proposal of an increase of 33⅓% is definitely out of line with established practice.

Even more clearly than in the case of buildings, therefore, the failure of the tentative bulletin to make any provision whatever for overtime depreciation on such items of equipment as power plant, heating and sprinkler systems, electrical equipment, and finishing machinery and equipment, must, we submit, have been due to inadvertence. There is obviously greater depreciation on power plant and auxiliary equipment when operated overtime. The same is true of finishing equipment, with the added consideration that finishing equipment must normally be operated overtime. The averages of the rates allowed in the past on power plant, auxiliary equipment, and finishing equipment, classified as between single-shift and double-shift operation, are as follows:

Type of Equipment	*Single Shift*	*Double Shift*
Power plant	6.07%	10.68%
Heating plant	5.55	7.50
Electrical equipment	7.28	8.00
Finishing equipment*	7.38	13.00

The averages of the estimated useful lives on the same types of equipment, together with the corresponding rates, are as follows:

	Single-Shift		*Double-Shift*	
Type of Equipment	*Life*	*Rate*	*Life*	*Rate*
Power plant**	20 yrs.	5.00%	15 yrs.	6.67%
Heating plant	19	5.26	16	6.25
Electrical equipment	18	5.55	14	7.14
Finishing equipment*	17	5.88	12	8.33

*Average for finishing machinery and dyeing machinery.
**Average for boilers and accessories and for steam engines.

We now come to a consideration of the inadequacy of the proposed allowance for overtime depreciation on preparatory, spinning and weaving machinery. That allowance is to be 1% additional depreciation for 100% overtime; *i.e.*, an increase of 33⅓% in the depreciation rate. It is our contention that this is a wholly inadequate allowance, not only in view of the experience of the cotton textile industry, but also in view of the established principles governing overtime depreciation generally.

A consideration of the past practice and expert opinion of the cotton textile industry confirms the conclusion that the Bureau's proposed allowance for overtime depreciation on these classes of machinery is entirely inadequate. The average of the rates used by the mills and allowed by the Bureau in the past for depreciation on machinery in the case of double-shift operation is 8.67%, as against 4.81% for

single-shift operation, an increase of 80.3%. The averages of the estimated useful lives of various classes of machinery for single- and double-shift operation and of the corresponding rates, are as follows:

	Single Shift		*Double Shift*	
Type of Equipment	*Life*	*Rate*	*Life*	*Rate*
Opening machinery.....	21 yrs.	4.76%	15 yrs.	6.67%
Picking machinery.....	21	4.76	15	6.67
Carding machinery.....	22	4.55	15	6.67
Combing machinery.....	21	4.76	15	6.67
Spinning machinery....	22	4.55	15	6.67
Weaving machinery....	21	4.76	15	6.67
Average.....	21.3	4.70	15	6.67

The average of the rates for machinery operated double-shift thus is, on the basis of estimated useful life, 41.9% greater than for machinery operated single-shift, as against the 33⅓% proposed by the Bureau.

Not only, moreover, does the tentative bulletin make inadequate provision for depreciation in the case of double-shift operation; it does not, as has already been pointed out, make *any* provision for additional depreciation for 24-hour operation other than that included in the inadequate provision for double-shift depreciation. A considerable number of mills, particularly in the South, operate 24 hours a day, so that this omission is of serious importance. The average of the rates allowed in the past for machinery operated 24 hours a day is 9.90%, as against 4.81% for single-shift operation, an increase of 105%. The averages of the estimated useful lives of machinery for single-shift and 24 hours operation, with the averages of the corresponding rates, are as follows:

	Single Shift		*24-Hour*	
Type of Equipment	*Life*	*Rate*	*Life*	*Rate*
Opening machinery.....	21 yrs.	4.76%	13 yrs.	7.69%
Picking machinery.....	21	4.76	13	7.69
Carding machinery.....	22	4.55	15	6.67
Combing machinery.....	21	4.76	12	8.33
Spinning machinery....	22	4.55	15	6.67
Weaving machinery....	21	4.76	13	7.69
Average.....	21.3	4.70	13.5	7.42

The average of the rates on this basis for 24-hour operation thus exceeds the rate for single-shift operation by 57.9%.

2. The arguments which have been advanced in support of the rates proposed in the Bureau's tentative bulletin are unsound as to the law and inaccurate as to the facts.

Three arguments—and only three, so far as we are aware—have been advanced in support of the proposed bulletin rates, either directly, or indirectly by way of attack upon the propriety of the rates used by the mills and accepted by the Bureau in the past.

(*a*) The argument has been advanced in the course of our past conferences with representatives of the Bureau that if the Bureau were to "adopt" the "liberal" policy advocated by the Institute with regard to the charging to operating expense of expenditures for repairs and supplies, including the replacement of machine parts, the depreciation rates of the mills would have to be reduced. We respectively submit at the outset that the reference to "adopting" a "liberal" policy is a misnomer, for, as we have hitherto pointed out to the Department, not only is the policy supported by the Institute one which the Bureau, except in sporadic instances in a few Revenue Districts, has consistently followed in the past, but it is the only policy which is countenanced by the law, the regulations, and the decisions of the Courts.

Waiving this matter of terminology, however, it is clear that the argument is without substance, since it is predicated upon the erroneous assumption that the "adoption" of this "liberal" policy involves a change in the present situation, which, in turn, requires a readjustment of depreciation rates. It it were a fact that the mills of the country had hitherto made a practice of charging replacements of parts and minor items of mill equipment in whole or in large part to capital account, and if they were now, through the adoption by the Bureau of a "liberal policy," to begin to charge such items to expense, there might be some basis for the claim that depreciation rates heretofore fixed on the basis of the capitalization or charging to depreciation reserves of replacements of parts should be revised downward. *But such is not the fact.* The returns to the Institute's questionnaire show that the almost unanimous practice of the mills in the past has been to charge such items direct to operating expense. That policy has been consistently followed by 89.20% of the mills and 83.89% of the spindles.

(*b*) It has also been argued that textile machinery will last 30 to 35 years or longer, if adequately maintained, as is shown by the records of the mills and by the circumstance that many mills are now using machinery of that age or older; and the conclusion has been drawn that the rates of depreciation hitherto claimed by and allowed to the industry have been too high. We understand that it is some such reasoning which is responsible for the bulletin's proposed rate of 3% on machinery. We take issue with this argument on the ground, *first*, that as a matter of fact the mill machinery which has remained in use 30 to 35 years is negligible in amount and relative value; and, *second*, that even if past history did indicate a life of 30 to 35 years for some machinery, that fact would not support a 3% depreciation rate as against the expert evidence produced at the conference showing that a much higher rate is necessary.

(*c*) It is further argued that certain mills have already recovered large percentages—said to be as high as 75 to 80%—of their investment through accrued depreciation reserves, although such investment is represented by equipment still in use and likely to be in use for some years more; and the conclusion is sought to be drawn that the depreciation rates allowed the mills in the past have been too high. This argument is unsound in two respects: *first*, because it assumes that merely because a mill has accrued depreciation reserves representing a large percentage of its investment in property still in use, it must necessarily have accrued depreciation at too high a rate in the past; and *second*, because it assumes that a representative proportion of the mills in fact have thus recovered a very large part of their investment through depreciation reserves.

Obsolescence Increasingly Important in Textiles

THE final, and possibly the most interesting, part of the argument contends that obsolescence is a factor of continually increasing importance in the cotton textile industry and must be allowed for as part of the depreciation rates of cotton textile mills; and that the rates proposed in the tentative Bureau bulletin are wholly insufficient because they fail to make any such allowance. An abstract of this section of the brief follows:

1. The factor of obsolescence is presently and continuously operating in the cotton textile industry, and its continued operation in the future is definitely predictable.

Up to the present point, we have considered the question of the inadequacy of the standard depreciation rates proposed by the Bureau's tentative bulletin without taking any account of the factor of obsolescence, and have pointed out that, even irrespective of this factor, the proposed rates are wholly inadequate. When account is taken, as it must be,* of obsolescence, the inadequacy of the proposed rates is even more clearly apparent.

The importance of obsolescence in the cotton textile industry was clearly demonstrated at the conference of May 23, 1930 by the concurring statements of mill executives, mill engineers, and representatives of textile machinery manufacturers. The machinery manufacturers represented were the Whitin Machine Works, manufacturers of all kinds of textile machinery except looms; the Saco-Lowell Shops, manufacturers of all kinds of textile machinery except looms, combers and winding machinery; the Draper Corp., manufacturers of automatic looms; and the Crompton & Knowles Loom Works, manufacturers of fancy automatic looms. The textile machinery manufacturers so represented manufacture more than 75% of the cotton textile machinery made in this country. In addition to the testimony

*Depreciation rates must, under the statute, include an allowance for obsolescence.

of the representatives of these machinery manufacturers at the conference, a large amount of documentary evidence on obsolescence was presented. This included statements by the Whitin Machine Works; the Saco-Lowell Shops; the Draper Corp.; the Crompton & Knowles Loom Works; the Barber-Colman Co., manufacturers of winding and warping machinery; the Fales & Jenks Machine Co., manufacturers of all kinds of textile machinery except looms and combers; and Standard Looms, Inc., manufacturers of automatic looms. The documentary evidence filed with the Bureau also included a comprehensive discussion by J. E. Sirrine & Co., one of the leading firms of cotton textile mill engineers in the United States, of the question of obsolescence in the cotton textile industry. We shall not attempt in this brief to restate this detailed evidence on obsolescence. We do propose briefly to summarize that evidence as a preliminary to discussing the question of how and on what basis the necessary allowance for obsolescence is to be made. Before doing so, however, we wish to make it clear that the type of obsolescence with which we are here dealing is gradual, predictable obsolescence, which can and must be taken account of before complete obsoleteness results, and not sudden obsolescence resulting from revolutionary and unpredictable changes or discoveries, which cannot be foreseen and provided for in advance. The evidence presented by the Institute brings out the following facts as to such predictable obsolescence in the cotton textile industry:

Obsolescence in the cotton textile industry is of two types—that resulting from changes in market requirements, and that resulting from new inventions and from changes and improvements in machinery design and construction. Both forms of obsolescence are of great importance to the mills, and must be taken into account by the mills if they are to continue in business.

The first type of obsolescence (sometimes referred to as "style obsolescence") results from changes in the requirements of the trade and has the effect of rendering economically useless machinery which is in perfectly good condition so far as wear-and-tear depreciation is concerned. Thus, the change from the old-fashioned bedsheet with a seam in the center to the modern sheet which is woven in one piece has rendered obsolete the narrow looms formerly used to weave sheetings; the changes in market requirements as to width of denims has rendered obsolete many narrow denim looms; the almost complete disappearance of the market for ginghams has rendered obsolete thousands of gingham looms; the increased use of rayon for filling in many fabrics has rendered obsolete a very large proportion of the mule spindles in the fine goods mills in New England; and the change from square-woven fabric to cord construction by the manufacturers of automobile tires has rendered obsolete many combers and special looms in tire fabric mills. Similarly, changes of style operate to render obsolete various types of finishing machinery. These changes in market requirements, rendering obsolete large amounts of machinery, must be expected in the future as in the past and must be provided against in advance by the mills.

Even more important than this type of obsolescence is the sort of obsolescence resulting from new inventions and changes and improvements in machinery design and construction. The effect of such improvements in textile machinery is felt in every department of the mills.

(a) Within the last few years opening and picking machinery has undergone revolutionary changes. The picking department of five years ago had four sets of machines. By three years ago, the number of machines had been reduced to two. Very recently a system of one-process picking has been perfected, which has rendered obsolescent all existing opening and picking machinery. The mills are replacing their old picking machines with a smaller number of modern machines. Vertical openers, formerly in general use, are being discarded. All picking machinery manufactured prior to 1920 is now obsolete, and that manufactured as late as 1927 and 1928 practically so.

(b) Carding machinery has been greatly improved, especially with regard to stripping equipment, and a system of continuous stripping is now being perfected, which will, if successful, render obsolete much existing equipment in the card rooms of the mills. Other improvements in carding machinery are being made.

(c) Combing machinery has undergone very great changes in the last few years. With the machinery formerly in use, comber production was 6 lb. per hour; now it is 20 lb. Five new types of combing machines, each an improvement in the then existing type, have been built by one textile machinery manufacturer since 1900. All combing machinery built prior to 1926 is practically obsolete. Combers which have been in use only 14 or 15 years are now being discarded and sold at junk prices.

(d) Drawing and roving machinery has undergone important changes. The design of drawing and roving frames has been radically changed, and their construction improved. Moreover, due to the introduction of long-draft spinning, much roving machinery has been rendered obsolete and is being discarded, although still in good mechanical condition. Furthermore, if present expectations with reference to the further development of long-draft spinning are realized *all* the drawing and roving machinery of the mills will be rendered completely obsolete, as the new machine will take the cotton direct from the card to the spinning frame.

(e) Spinning machinery has been greatly improved. Entirely aside from the development of long-draft spinning which has been referred to above, there have been radical changes in design and great improvements in construction. Tape drive is replacing band drive, giving uniform spindle speed and uniform twist; wider gauge construction permits the use of larger spinning rings and faster speeds and enables more yarn to be wound on the bobbins, resulting in fewer stops for doffing; and there have been improvements in twisting machinery. As a result of these improvements, much of the spinning machinery now in the mills is definitely obsolete, and is being discarded.

(f) Winding, spooling and warping machinery has undergone revolutionary changes in the last five years. The types of spoolers and warpers formerly used are being replaced by modern automatic spoolers and highspeed warpers. Modern winding machinery has completely rendered obsolete the old type of spoolers to such an extent that at least one machinery manufacturer has practically abandoned the construction of spoolers. Warpers made five years ago are now absolutely obsolete (*Kettley, Trans.*, p. 45).

From 1917 to the present time (Apr. 1, 1930), 105 mills have replaced their spooling and warping machinery with new machinery made by a single manufacturer. 146,844 old-style spooler-spindles have been replaced by 46,800 automatic spooler-spindles, and 1,427 old-style warpers have been replaced by 326 modern high-speed warpers. Substantially all this development has taken place since 1925.

(g) Weaving machinery has been the subject of continuous development and improvement for the last 30 years. Up to 30 years ago, the looms used in the mills had been non-automatic. About 1900, the Draper Corp. developed

Mr. Hines' Opinion

"I do not believe that anything approaching such a thorough analysis and presentation has ever before been made on behalf of the cotton textile industry, and I am not aware that anything approaching its thoroughness has so far been prepared in any other industry." . . . This opinion of the accompanying brief on depreciation rates was expressed by Walker D. Hines, chairman of board of The Cotton-Textile Institute.

the automatic bobbin-changing loom, which gradually displaced hundreds of thousands of non-automatic looms. Only a few non-automatic looms (for special kinds of work) are now being made. The automatic loom has been the subject of constant improvements since its invention. Such improvements have made it possible to weave many fabrics on automatic looms which formerly could be woven only on non-automatic looms. Various additional devices have been developed and perfected, including stop-motions, which stop the loom when a warp thread breaks, so as to prevent the weaving of imperfect cloth; feeler-motions, which operate to change the bobbin in the loom before the thread is exhausted, thus preventing broken picks; and many other devices, including new types of harness motions, take-up motions, let-off motions, etc. While these improved devices will work after a fashion on old automatic looms, an old loom so improved will not be as efficient as a modern loom, so that it is not possible thus fully to modernize obsolescent equipment, just as it is impossible successfully to modernize a non-automatic loom by adding automatic attachments. In addition to the development of particular devices, the design of the loom as a whole has been constantly perfected. The Draper Corp. has made 19 models of looms since 1900. The Crompton & Knowles Loom Works in 1928 perfected an improved fancy loom which is especially adapted to changes from one type of fabric to another and which greatly reduces weaving costs. It renders obsolete the style of automatic loom formerly manufactured by that company, just as the earlier automatic loom rendered obsolete the non-automatic type formerly manufactured. This is graphically brought out by the following table, showing the number of looms built and sold by the Crompton & Knowles Loom Works from 1904 to date, by five-year periods (*Obsolescence Data*, p. 16):

NUMBER OF BOX LOOMS BUILT FROM 1904 TO DATE.

5-Year Period	*Crompton Type Non-automatic*	*Crompton Type Automatic*	*Cotton King*
1904-1909	4,794	1,575	0
1909-1914	4,009	4,824	0
1914-1919	736	1,400	0
1919-1924	3,887	12,054	0
1924-1929	596	4,644	20
1929 to date.....	0	0	1,591
	14,022	24,497	1,611

Moreover, a considerable number of narrow looms have been rendered obsolete by the decrease in the market demand for narrow weaves. As a result of such developments, looms may well be thrown out as obsolete 15 years after they are installed.

(h) There have been important improvements in finishing machinery during recent years. This has been particularly true of dyeing machinery. The factor of obsolescence is very important in the case of finishing machinery and equipment generally.

(i) In addition to these various improvements in design of specific kinds of textile machinery, there has been a marked improvement in the quality and manner of construction of textile machinery generally. The adjustments and fits are better than formerly, and better types of bearings are used. The machinery builders are using heavier machine tools that do more precise work than formerly. The machinery is designed heavier and built more accurately, for closer adjustments and higher speeds, so that it can turn out a better product at lower cost. Speeds are more uniform and stoppages have been reduced. This improvement in construction is particularly evident in the case of looms; and is true of all classes of textile machinery.

As a result of these improvements in textile machinery design and construction, the modern machinery will produce more of a better quality of product at a lower cost and is adapted to the making of a greater variety of fabrics. It is accordingly possible for a mill with modern machinery to make money while an exactly similar mill with old (though by no means worn-out) machinery is losing money. In view of the highly competitive character of the cotton textile industry in this country, and in view of the further fact that, since the United States is a high-wage nation, the industry can meet foreign competition only by using the most modern labor-saving equipment, it is essential that the mills discard obsolescent equipment and replace it with modern equipment. In order to be able to do so, they must make adequate provision *in advance* for obsolescence.

This factor of obsolescence has been increasingly important in recent years. Progress in the design and construction of textile machinery is taking place at an increasing rate. This is due in part to increased research activities by the manufacturers; in part to increasing demands on the mills by the trade for a better and cheaper product; in part to the intensity of competition between the mills themselves; in part to the pressure of foreign competition; and in part to a growing realization on the part of the manufacturers of textile machinery that their only hope of continuing in business profitably is to produce improved machinery to replace that now in the mills, as there is little likelihood to be any large demand for additional textile machinery for some years to come. There have been more improvements in the field of textile machinery in the past ten years than in the thirty years previous, and more in the past two years than in the previous ten.

This progress is sure to continue in the future. The textile machinery manufacturers are giving increasing attention to research and to the development of new and improved types of machinery. The trend is one of invention and improvement. This is indicated, for example, by the increase in the number of patents on weaving machinery issued from 1922 to 1930, as well as by the similar increase in the total number of such patents in force from 1900 to date.

The statute contemplates an allowance for obsolescence *as part of each taxpayer's depreciation allowance*. This is plain from the terms of Section 23 (k) of the Revenue Act of 1928, which provides for "a reasonable allowance for the exhaustion, wear and tear of property used in the trade or business, *including a reasonable allowance for obsolescence.*" *(Italic ours.)* Obsolescence under the tax law is thus not a separate thing, of itself. It is an element in the depreciation allowance, and must be considered in fixing depreciation rates.

Conclusion

The foregoing discussion, we believe, demonstrates: (*a*) that it is wholly impracticable to apply standardized rates of depreciation to the cotton textile industry and that any attempt to do so will produce highly inequitable results; (*b*) that, even if it be assumed that a standardization of cotton textile depreciation rates would be practicable, the rates proposed in the Bureau's tentative bulletin are wholly inadequate, entirely irrespective of the factor of obsolescence; and (*c*) that obsolescence is a factor of continually increasing importance in the cotton textile industry, which must be allowed for as part of the depreciation rates of cotton textile mills, and that the failure to make any such allowance constitutes a fatal defect in the Bureau's tentative bulletin.

The cotton textile industry is one of the least prosperous of the industries of the United States at the present time. It seems singularly inappropriate that it should be singled out at this time from all the other industries of the country for a drastic reduction in depreciation rates and a consequent increase in taxes—especially in view of the declared policy of the President and Congress, expressed in the recent reduction in the corporation tax rate, that Federal tax burdens should be lightened in order to stimulate industry. We therefore respectfully urge that the proposed plan of establishing standard rates of depreciation for the cotton textile industry be abandoned and that the tentative Bureau bulletin proposing such standard rates be recalled.

The brief was submitted by A. C. Rearick, Sidney P. Simpson and John K. Watson, all of counsel to The Cotton-Textile Institute; and by Sydney P. Munroe, manager of the Cost Section of the Institute.

General Arbitration Council Planned by Cotton Textile Industry

FORMATION of a General Arbitration Council to provide more comprehensive means for conciliation, mediation and arbitration in the cotton industry was undertaken Wednesday by representatives of a number of cotton trade associations who attended a meeting held in the office of The Cotton-Textile Institute.

An outline of an organization to be known as the General Arbitration Council of The Cotton Textile Industry was drawn up and will be submitted to various organizations within the industry. If it is approved by these organizations, each is to designate a representative as a member of the Council which will then proceed with its work in supplementing existing machinery for arbitration in the industry.

This action today followed a number of preliminary meetings at which the general subject of mediation and arbitration in the cotton industry had been discussed under the auspices of The Cotton-Textile Institute at the instance of the National Association of Cotton Manufacturers.

Present at the meeting were:

Walker D. Hines, chairman of the board, The Cotton-Textile Institute; George A. Sloan, president, The Cotton-Textile Institute; Frederick A. Colt, merchandising adviser, The Cotton-Textile Institute; Lincoln Baylies, president National Association of Cotton Manufacturers; Robert Lassiter, representing the American Cotton Manufacturers Association; P. S. Newell, secretary, Association of Cotton Textile Merchants of New York; M. J. Warner, chairman of the Arbitration Committee, Textile Converters Association; and George Seidman, chairman of the Arbitration Committee, Textile Brokers Association.

The outline for the organization, and scope of functions, of the General Arbitration Council follows, in part:

Representation

The Council shall consist of representatives of the following organizations: The Cotton-Textile Institute, Inc., American Cotton Manufacturers Association, National Association of Cotton Manufacturers, Association of Cotton Textile Merchants of New York, Textile Converters Association, and Textile Brokers Association.

It is understood that invitations to be represented will also be extended to Fine Cotton Goods Exchange, Rayon and Synthetic Yarn Association, and National Association of Finishers of Cotton Fabrics.

Scope of Functions of the Council

The Council will be charged with the function of endeavoring to promote conciliation, mediation and arbitration in disputes arising between any two or more persons or groups involved in the cotton textile industry or trade and with the further function of devising means both to utilize to a greater extent existing conciliation and arbitration machinery and to develop additional and more comprehensive machinery for that purpose.

The Council will be a self-governing body, with power to make its own rules. Without in any way limiting the self-governing character of the Council, the following matters are mentioned as illustrative of functions which the Council, in its discretion, might decide to carry on:

Urge that there be included in contracts, and other transactions pertaining to the sale of cotton goods or to the finishing thereof or to other services in connection therewith, agreements to arbitrate.

Promote the carrying out of such agreements when made.

Prevail upon disputants to arbitrate even when they are not bound by agreement to do so.

Propose to disputants that they avail of existing arbitration machinery when agreeable to them; avoid anything that would tend to scrap existing machinery, at least until such scrapping is indicated to be advisable by very considerable experience and by consent of all the interests involved and represented on the Council.

Work out a more comprehensive scheme of arbitration for the convenience of disputants involving the selection of an extensive panel of persons willing to serve as arbitrators upon request, this panel to be made up of adequate representatives of every branch of the industry and trade.

Conduct a continuing educational campaign in favor of arbitration; and at the proper time submit the matter to the various distributing agencies which are not represented on the Council and seek to get their full understanding of what is proposed and their approval.

Administrative Organization

This must also be decided upon by the Council, and will probably develop through a process of evolution, in the light of experience. Without intending in any way to limit the independence of the Council, and purely by way of illustration, the following is outlined as administrative work, some or all of which the Council, in its discretion, may decide upon from time to time:

Some person will be charged with the responsibility of giving effect to the policies of the Council. The discharge of this responsibility will involve a great deal of work.

He could aid the Council in devising and carrying on educational work.

He could seek to inform himself concerning disputes when they arise. He could encourage disputants to come to him for assistance in obtaining conciliation or arbitration. Where there are no agreements to arbitration he could use his persuasive powers with the parties to arbitrate.

When arbitration of the particular dispute is decided upon, he could assist in setting up the particular arbitration machinery which may be agreeable to the parties. He could point out how and where the formal submission to arbitration can be arranged. He could aid the parties in deciding upon appropriate arbitrators. He could facilitate the actual arbitration hearing. He could give the necessary assistance in obtaining a room and appropriate clerical help, if any, in connection with the actual arbitration proceedings. He could interest himself in knowing that the arbitration awards are carried out.

He could perform similar functions in promoting conciliation or mediation of specific disputes when that appears to be the appropriate course.

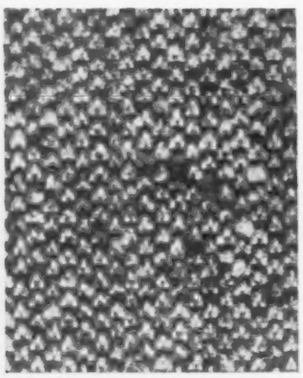
He should from time to time report to the Council, seeking its advice and obtain its instructions. As the work develops, it will probably be necessary to have some competent man devote his entire time to the foregoing work and he will need office room and clerical help.

Assistance of the Institute

For the time being, and in order to get the work launched with the minimum of expense, and in order to defer the creation of a definite administrative organization until experience shall indicate what is best, the Institute will at the outset be willing to undertake the foregoing administrative work with its existing staff, subject of course to the directions of the Council.

How Many ENDS and PICKS *Does the Weave Call For?*

By Robert A. C. Scott



IN THIS and subsequent articles the writer hopes to demonstrate the important bearing different weaves have on the woven fabric. It is admitted that many valuable volumes have already been published dealing in part on this subject, but the belief is still present that cloth construction is such an important factor in woolen and worsted manufacture that the writer may be pardoned for reviewing old and sacred ground.

We shall first consider square cloths; i.e., cloths which have the same weight and number of ends in warp as picks in filling and which have the same degree of bending.

The most widely used weave and the one which produces the simplest form of interlacing is of course the plain weave, which is also known as the tabby, calico, poplin, alpaca, and taffeta weave. This is the tightest weave of all and, owing to its firmness in structure, is used in all manner of coarse and fine cloths. In accepting the fact we naturally conclude that fewer ends and picks are necessary in a square cloth employing this weave.

Formula for Maximum Setting

The following formula will be found an invaluable aid in obtaining the maximum loom setting—i.e., number of ends and picks—for square cloths:

$$\frac{\text{Diameters per inch} \times \text{threads in weave}}{\text{Threads in weave} + \text{intersections in weave}}$$

This gives us the maximum number of threads which can be placed side by side in one inch.

To find the approximate diameter of a given count of yarn extract the square root of the yards per pound and deduct 8% for silk, cotton, and linen yarns; 10% for worsted yarns; and 15% for woolen yarns.

Example: Find the respective diameters of a 4-run woolen yarn and a single 25s worsted yarn.

4 run $\times$ 1600 yards (standard number) = 6400 yards

$\sqrt{6400} = 80$

80 diameters per inch less 15% for woolen = 68 threads

25s worsted $\times$ 560 = 14,000 yds.

$\sqrt{14{,}000} = 118$

118 diameters per inch less 10% for worsted = 106 threads

To find the maximum setting for plain weave by the above formula, we proceed as follows:

$$\text{4-run woolen} = \frac{68 \times 2}{2 + 2} = 34 \text{ ends and picks per inch}$$

$$\text{25s worsted} = \frac{106 \times 2}{2 + 2} = 53 \text{ ends and picks per inch}$$

Very accurate results can be had by the following short methods for woolen, worsted, and cotton:

Woolen yarns = $17\sqrt{C}$ or $\sqrt{17 \times 17 \times C}$

Worsted yarns = $10\frac{1}{2}\sqrt{C}$ or $\sqrt{10\frac{1}{2} \times 10\frac{1}{2} \times C}$

Cotton yarns = $13\frac{3}{4}\sqrt{C}$ or $\sqrt{13\frac{3}{4} \times 13\frac{3}{4} \times C}$

For 4-run woolen, $17 \times 2 = 34$

For 25s worsted, $10\frac{1}{2} \times 5 = 52\frac{1}{2}$

For 36s cotton, $13\frac{3}{4} \times 6 = 82\frac{1}{2}$

These short methods, it must be remembered, are applicable only to cloths employing plain weave and are not adaptable to looser types of weaves.

Dr. Thomas Oliver, principal of the Scottish Woolen Technical College, Galashields, Scotland, has computed the following table of approximations for common twill weave, and when used in conjunction with his table of ratios it will be found not only a convenient form but also a very accurate and practical compendium:

Approximate Ends per Inch in 2/2 Twill

Cotton 18 to 45: $5/3\ C + 50$
6 to 18: $11/4\ C + 30$

Worsted 18 to 45: $7/5\ C + 35$
6 to 18: $2\ C + 24$

Woolen $2\frac{1}{2}$ to $6\frac{1}{4}$: $6\ C + 20$
1 to $2\frac{1}{2}$: $8\ C + 15$

Ratios

Plain weave	6
2/1 twill	7
2/2 twill	8
2/2 mat	$8\frac{1}{2}$
Mayo or twilled mat	$8\frac{1}{2}$
3/3 twill	9
4/3 twill	$9\frac{1}{2}$
4/4 twill	$9\frac{3}{5}$
3/3 mat	$10\frac{1}{2}$
Venetian	$10\frac{1}{2}$
Whipcord 5/2 or 6/2	11
Whipcord 6/1 or 3/1	11
Warp cord 4/4	12
Warp corkscrew, 9-end	12
Warp, sateen, 8-end	12

To find the ends per inch in a plain weave, for example, by the above tables, we first find the approximate ends per inch in a 2/2 twill employing the same yarns, and then multiply by 6/8. To illustrate the use of the above tables let us ascertain the ends per inch in various weaves for the following yarns:

	Plain Weave	2/2 Twill	Basket	3/3 Twill
4-run Woolen	33	44	47	$49\frac{1}{2}$
25s Worsted	$52\frac{1}{2}$	70	$74\frac{1}{2}$	$78\frac{3}{4}$
36s Cotton	$82\frac{1}{2}$	110	117	$123\frac{3}{4}$

The slight variation between the formula method and

AS A GUIDE in determining what setting will be desirable for a proposed fabric, certain formulas are very useful. Mr. Scott presents here some of these formulas which experience has shown him to be particularly valuable. He also explains how experience and good judgment can be employed, particularly in connection with woolens and worsteds, to allow for certain important variables that are bound to enter each problem.

the tabulated form shows that the latter is near enough for all practical purposes and is likely to save the designer time and trouble in figuring new constructions.

Experience and Good Judgment Valuable

The foregoing treatise on calculations for determining the maximum number of threads per inch according to weave employed must not be taken as being a practical and final solution to accurate cloth setting, but rather as a guide in the construction of new cloths. As a matter of fact these approximations do not take into account the angle of curvature of the threads, the kind of finish to be applied, or the class of raw material of which the warp and filling are composed. Moreover, the question of finished weight per yard and the marketing price have a direct bearing in the building of cloths.

It will thus be seen that experience as well as good judgment are valuable assets in cloth building, irrespective of the individual's theoretical knowledge of fabric construction.

Let us now consider a few practical examples of cloth setting in relation to weave employed.

Assume we wish to make a woolen suiting with a warp and filling of 4-run yarn, to finish 10/11 oz., 56-in. wide, using plain weave and a good quality of stock, and having a width contraction of 20% and a length shrinkage of 10%.

We already know that we cannot exceed 34 ends and picks per inch using 4-run yarn, and we find by simple calculation that 70 in. wide in loom less 20% will give us 56-in. finished width. Having arrived at the loom width, we then figure the estimated weight on the basis of the maximum setting—i.e., 34 ends and picks—which we find to be 1½ oz. overweight. In addition, this setting would in all probability cause trouble in weaving and increase darning costs as a result of weaving imperfections.

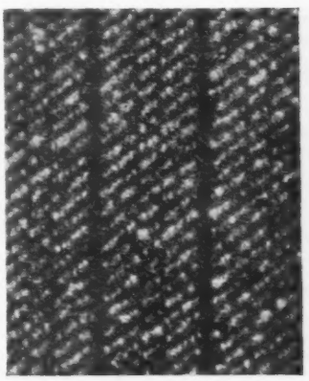
We find then that use of the maximum setting is both dangerous and unsuitable, but the following formula aids us in deriving a practical solution:

$$\frac{(\text{Thds. per in. in original cloth})^2 \times \text{Wt. of required cloth}}{\text{Wt. of original cloth}} = (\text{Thds. per in. in new cloth})^2$$

$$\frac{34 \times 34 \times 10\frac{1}{2}}{12} = \frac{12138}{12} = 1011$$

$$\sqrt{1011} = 31 \text{ ends and picks per inch}$$

On account of the width contraction being greater than the length shrinkage, more picks than ends are required in the loom; otherwise a square cloth would not result after finishing. A suitable setting therefore for the above cloth would be 30 threads per inch, 70 in. wide, and 32 picks per in., giving a firm and well-balanced cloth weighing 10/11 oz. of 56 in. wide finished. In the event of poor or weak quality of yarn being used a looser setting would be necessary, also more width in loom, with a higher resulting percentage of contraction in order to get the desired weight. It will hardly be necessary to add that a different fabric would also result.



Again, suppose we wish a dress cloth using 1/25s worsted, 64s quality, to weigh 6/6½ oz., to have a finished width of 54 in., scoured finish only, piece dyed, and woven in plain weave in an automatic loom. In this case the width contraction should not exceed 15%, and the length shrinkage should be nil. Again, owing to the speed of the automatic loom, a too-firm setting would not be advisable. Consequently, the maximum of 52 ends and picks would be unsuitable on account of both firmness and weight (1½/2 oz. overweight).

$$\frac{52 \times 52 \times 6\frac{1}{2}}{8\frac{1}{2}} = \frac{17576}{8\frac{1}{2}} = 2062.$$

$$\sqrt{2062} = 45,$$

so that 44 threads per inch, 64 in. wide in loom, and 46 picks, would give a very desirable cloth, meeting all the above specifications.

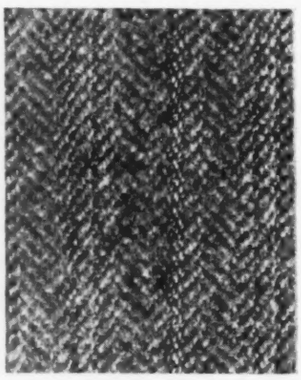
By comparison of these two cloths we find that the woolen cloth was set about 9% under the maximum; and the worsted cloth, about 15% under the maximum—proving that setting is really a practical branch of the art of designing or construction of cloths, and is not conformable to mathematical formulas. In other words the law of diameters and intersections constitutes an invaluable, yet secondary, contribution to the principles of cloth setting.

It is never practical to exceed the diameters of the thread per inch in square cloths, as weaving trouble and high darning costs are likely to result. In like manner a reduction of over 25% of the maximum is likely to give a sleazy and unsatisfactory cloth. Both of these contingencies, however, are influenced by the quality and nature of raw materials used; for example, yarns of fine wools are on the average more suitable for firmer setting than the coarse-fibered materials, worsted threads more suitable than woolen threads, and two-ply yarns more suitable than single yarns, etc.

So far we have only considered construction of cloths

in relation to the plain weave, which, as previously stated, is of a firmer construction than any other known weave, thereby allowing the designer more latitude in setting. That is to say, where a 25% reduction from the maximum setting may be practical in plain weave, it is doubtful if the same ratio of reduction would be permissible in say a 2/2 twill or weaves of a looser type. The reason for this is not far to find, when we remember that firmness of weave is in proportion to its thread interlacings or degree of floats. As an illustration of this point, we would refer you to the tables of ratios in which you will find the 2/2 twill has a ratio of 8, whereas the 2/2 basket has a ratio of 8½; yet both have the same number of threads and intersections. By extending the plain weave both vertically and horizontally, thereby having two or more threads working together in both directions, we have what is termed hopsack, mat, or basket weaves. These double interlacings form a looser type of weave than the twill orders of construction, which therefore, must be taken into account when building new cloths.

Incidentally then, we can safely formulate the following three factors: threads in weave, number of intersections, and floating dimensions of the threads, as being combining factors in determining correct setting. No set rule, however, can be laid down as to the increase or decrease necessary to attain the desired fabric. This is largely a case of experience and experimentation.



It is hardly necessary to give further illustrations of cloth construction employing different weaves, as the table of ratios in conjunction with the table of approximations compiled by Dr. Oliver constitute a most useful and practical guide in this connection.

Common Fabrics

In concluding this chapter on square-cloth structure it would be well to consider briefly a few generalties in the construction of the more common fabrics of the present time. In addition to the class of raw material used, the nature of finish, the weight per yard finished, and the market price previously mentioned, having a direct influence on cloth construction, the purpose for which the cloth is intended also influences the basic principles of construction.

Dress fabrics, being of a lighter weight and generally of a looser texture, require looser construction, about 20% under the calculated approximation by the diameter system. Plain weave is most generally used in this type of cloth, although a number of cloths are to be found in the market in which 2/2 twill or basket weave has been employed with good results. The deciding factors in weave selection are count of yarn and finished weight desired.

Ladies' coatings. Various constructions are in vogue for this type of cloth. Piece-dye fabrics of the heavier weights have a firm construction; and by special finishing processes, a substantial yet soft-handling fabric results. Light-weight and fancy types, however, admit of looser texture and sometimes fancy yarns are employed which, being effective, materially enhance the selling value.

Men's suitings. As a general rule it may be stated that this class of material is of a firm and well-knit construction. Woolen suitings such as cassimeres are set about 10% under the maximum and from 68 to 72 in. wide in the loom. The width contraction is about 20%, and the length shrinkage varies from 5 to10 %. The exceptions of course are the coarse tweeds or cloths made with coarse raw material which may be designated as scoured cloths only and are set 64 to 68 in. in loom and about 5 to 10% under the maximum.

Importance of Finish

Topcoatings. Finish plays a very important part in this type of fabric. Cloths intended for a napped finish require to be set fairly firm and should not exceed 10% under the maximum width in the loom, from 70 in. and upwards, according to the looseness of the loom structure.

Average shrinkage in length is about 7½%. Natural- or clear-finished cloths are of a firm construction and consequently call for less fulling. Better raw materials are the general rule rather than the exception in the latter construction in order to minimize yarn and weaving imperfections which, owing to the nature of finish, would be apt to show on the finished cloth. The weight of these cloths varies from 16 to 20 oz., 56 in. wide, with the prevailing tendency towards the lighter weights.

Overcoatings. This class of merchandise embraces a large variety of constructions, depending on weight, upon count of yarns used, and upon whether single or double cloth structure is employed. Generally speaking, however, the most common type is the backed or double-cloth fabric which admits of a heavier weight and a firmer texture. Setting rules for double-cloth structures call for so many exceptions that it may be better to refrain from laying down any hard and fast rule. So many conditions enter into this type of cloth setting, such as frequency of stitching, finish, nature of material, etc., that rules are apt to confuse rather than help the student in this instance.

As a guide, however, it may be permissible to state that the single set plus 50% would be about the maximum; and single set plus 20%, the minimum. For instance, using 3-run woolen yarn back and face in a double cassimere weave of fairly firm stitching, a construction of 58 ends and picks would give a firm and serviceable finished cloth of 30-oz. weight. The minimum would be 46 ends and picks, giving a cloth finishing 25/26 oz. per yard.

Single-cloth structures necessitate the use of low-count yarns and are heavily fulled, having a dense cover, such as fleece overcoatings. These are set rather loose and very wide in the loom, having a width contraction from 25 to 33⅓% and a length shrinkage of 10 to 20%. The best selling weight in this type is 30/32 oz. 56 in. wide, and invariably it is made of poor stock—waste predominating.

The foregoing covers the five main types of cloths, in each of which many variations are now on the market. Enough, however, has been written by way of explaining their relative constructions and uses, and it is hoped that a better understanding of cloth cvonstruction and its underlying principles will result therefrom.

Further articles will deal with cloths which do not come under the category of square cloths, such as cloths using different counts of yarn in warp and filling, whipcords, corkscrews, Bedford cords, etc.

The Buyer's Viewpoint

Edited by Miss Lillian Edgerton, research counselor, of New York. Readers are invited to offer comments on the subjects treated, or to submit questions regarding defects which contribute to the "returned goods" evil in retail circles, and which can be traced back to manufacturing faults.

—Editor

Lisle Hose

THE increasing production of domestic lisle hose for men, women and children reopens a broad field for the use of cotton yarns.

These are the difficulties which if not overcome will do material damage to this trade:

1—Some hose which appear soft and silky when new will, after repeated launderings, result in materially dulled luster, harsh feel and distinctly roughened surface.

2—The dyes after short usage, change or fade, and, in some cases, the color of the heel and sole reinforcements are decidedly different from the color of the boot.

This seems an opportune time for lisle hose manufacturers to establish unusually fine values.

Due to the increased production of silk hose, the popularity of lisle hose largely depends on the permanent soft, silky feel and subdued luster of the yarns as well as the success in dyeing seasonal colors so they will remain permanent after repeated laundering.

Broadcloth for Shirts

"PRESHRUNK" has been a popular selling point for broadcloth shirts for this season.

There is considerable merit in the idea and an increasing consumer demand for the production of shirts which will not shrink after laundering.

Some preshrinking processes have materially hurt the natural luster characteristic of the finer grades of broadcloth. This may not be due so much to the shrinking process as to the use of short, coarse fiber cotton yarns, and other factors which may decrease the luster.

If preshrunk broadcloth shirts are to retain their popularity, the following suggestions are worthy of consideration:

1—That manufacturers and salesmen be more guarded in guaranteeing shirts "absolutely not to shrink."

2—That the characteristic luster of broadcloth be retained.

3—That the fabric shall remain smooth and firm after laundering rather than to "full up," producing in many cases almost a nap.

Shantung

SILK shantungs have been an outstanding volume seller for women, girls and children, principally in lounging pajamas and beach sets as well as dresses and suits. According to market tendencies, next spring and summer will be even more successful a season than the present one.

The analyses of many of the shantungs on the market show a shrinkage of from 6½% to 13% in the warp direction, and from no shrinkage to 2½% in the filling direction. These fabrics had a varying tensile strength of from 46 to 73.4 lb. in the warp direction and 35.08 to 95.6 lb. in the filling direction.

The cost of the fabric was no indication of the amount of shrinkage or strength which might be expected of the fabric.

The retail stores are beginning to request that garment manufacturers use fabrics which are not only styled right but have been tested and show a minimum shrinkage and sufficient construction to be serviceable.

The logical place to begin to correct difficulties which result in adjustments is at their source.

From this season's experience there are at least three factors which should be considered in the production of next season's fabrics in order to avoid returns due to unsatisfactory fabrics:

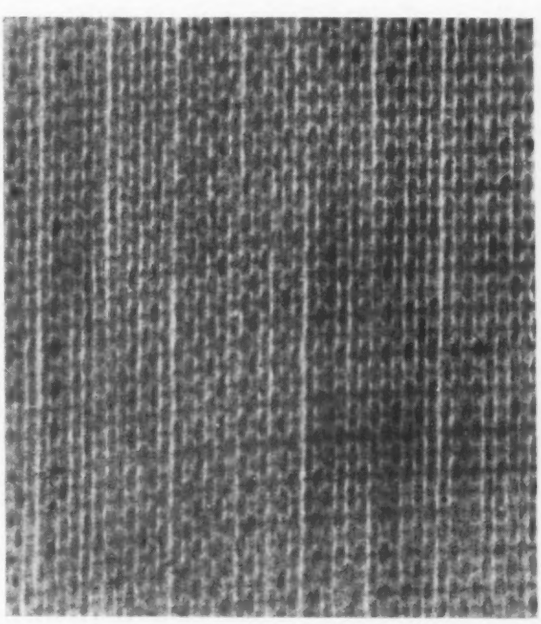
1—Decrease the amount of shrinkage in both warp and filling directions.

2—Construct fabrics which have as little tendency as possible to slip and shift at the seams and points of strain.

3—Dyes should be sufficiently fast to stand repeated washings without changing, or, in cases of colored trimming, of running into the other colors of the garment.

Reed Marks in Fabrics of Synthetic Yarns

REED marks in silk fabrics, particularly of the taffeta and radium types, have been almost entirely overcome, but such is not the case with many fabrics made from synthetic yarns. Reed marks in synthetic-yarn fabrics are perhaps more noticeable than in other types because of the regularity of the filaments and, in most cases, their natural wiriness. However, the retail buyer and the ultimate consumer will not stop to reason that there is no real damage done to the fabrics. The presence of the reed marks gives the appearance of carelessness in weaving and the fabrics look as though the threads will shift easily with the slightest strain. This appearance will quite naturally decrease the turnover in production and, consequently, the profits on materials containing reed marks.



Photomicrograph of rayon fabric showing reed marks

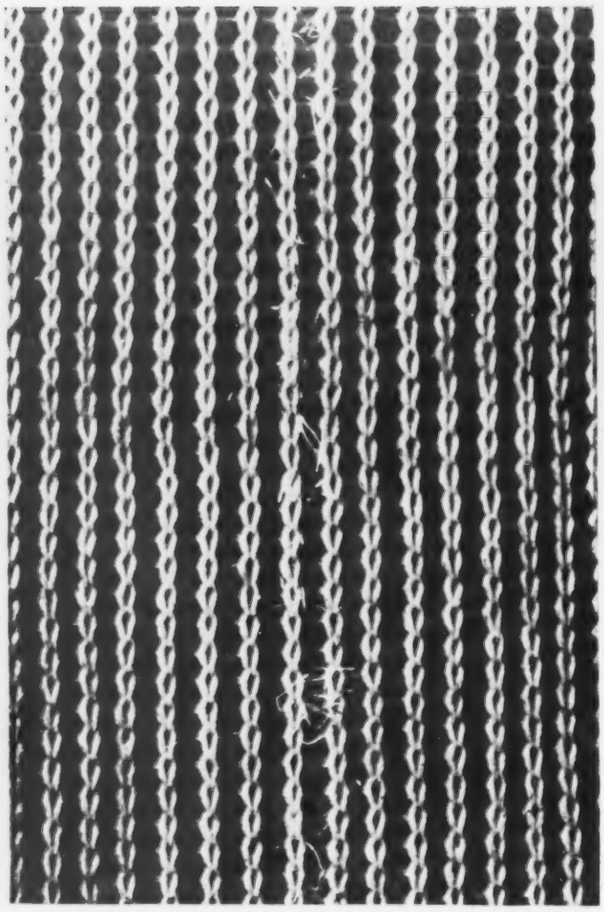


Fig. 1. Fuzz caused by a rough needle. Note that it follows a wale

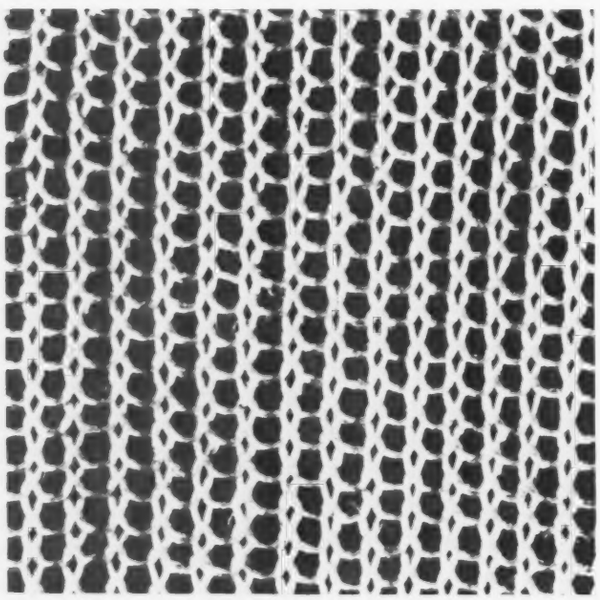


Fig. 2. Fuzz caused by broken filaments in the silk. Note that the breaks are intermittent and do not follow any particular wale or course

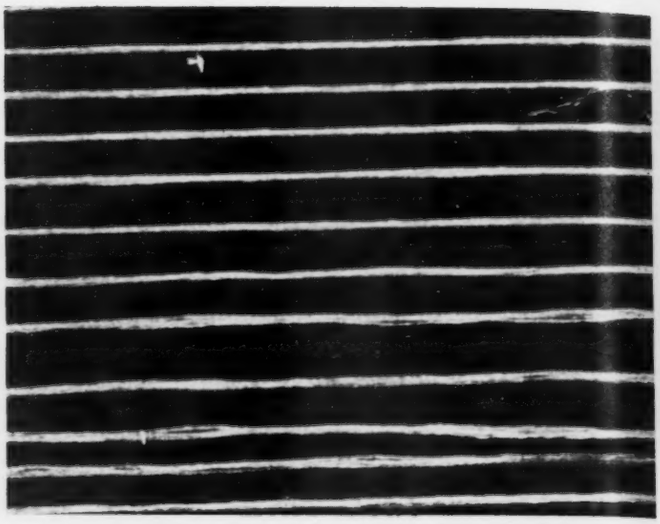


Fig. 3. Panel of hosiery tram held in the twist. These can

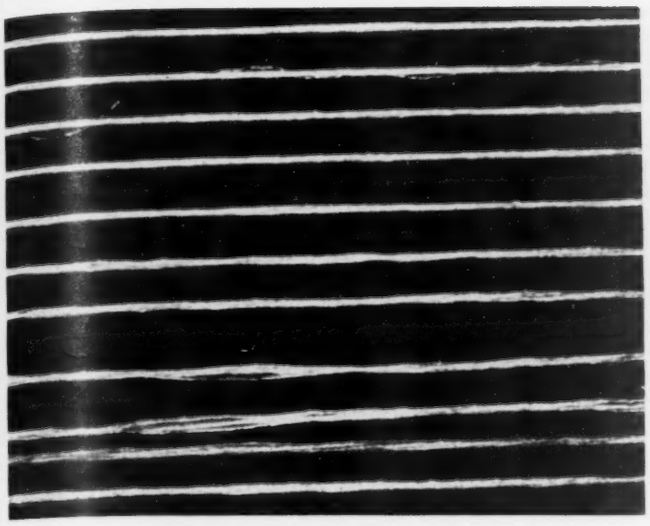
Fuzziness in

By Herbert

IN THE June 7 issue of TEXTILE WORLD, an inquirer asked what were the usual causes of fuzziness in silk stockings. The answer enumerated the various parts of a knitting machine which may break the filaments and permit them to protrude. All of these defective machine parts, such as bad needles and bad sinkers, will produce a fuzzy stocking with the fuzz of broken fibers running along one wale. This is shown in Fig. 1.

In addition to defects made by the machine, there are other causes of fuzzy stockings. In the latter case, the protruding fibers do not follow one particular wale or course; they occur all over the goods in no particular pattern. As the original answer given to this inquiry states, a rough cone will cause the yarn to be roughened and may break the filaments, and also a rough guide will chafe the yarn and cause fuzz. There are still other causes which are more difficult to locate because they occur intermittently and can not be run down, as can be a defect caused by a bad needle. Fig. 2. is a good example of broken filaments or fuzz on hosiery that has not been caused by a knitting-machine defect. Notice that the broken filaments are scattered here and there.

Another reason for broken filaments is poor lubrication of the silk during the throwing and subsequent winding and back-winding operations. If an improper oil, or insufficient amount of silk soaking oil, has been used in the soaking of the silk, the silk will lack lubricity. This will cause the filaments to become broken during some of the processes. On the other hand, if there is sufficient oil in the silk, this will lubricate the fibers and carry them through the various processes so they will not be ruptured. The oil gives a certain amount of adhesion to the silk, so the twist can be held in the tram, but if the oil is deficient in this quality, some of the threads that go to make up the tram will be separated. These will stick out like slack twist and permit the loose filaments to be caught on some part of the machine. In this way there is a chance that the fila-



showing some filaments not easily be caught and broken

Silk Hosiery

C. Roberts

ments will be broken and produce a fuzz. Fig. 3 shows a panel of hosiery tram where the threads have separated and can be caught and broken. In fact, one of the threads has already been broken.

If the soaking oil is unsuited for hosiery tram, it will not produce a soft, flexible yarn; when the yarn is bent to form the stitch, it will be broken in places, and these broken ends will make a fuzz. Some of the soaking oils that are unsuited for hosiery, because they cause some of the threads to break, have the property of drying out and leaving the silk harsh and water repellent. When silk is water repellent, it will not take up the backwinding solution or the water on the machine. As a consequence, the silk is knit too dry, and some of the threads and filaments break in knitting.

One manufacturer questioned this statement and made the following experiment. He selected a bale of silk and divided it into two lots. He used two different types of soaking oil to soak and throw the silk. One lot of goods was soaked with soap and oil. The other was soaked with a soluble silk-soaking oil. After the lots were thrown, so as to eliminate any variable factor due to equipment, they were knit into full-fashioned hosiery.

When the goods came off the machine, they were dried and examined under the microscope. Fig. 4 represents a random section of the lot which was soaked with soap and oil. It will be noticed that there are a large number of broken filaments and also that the knit stitch is far from perfect. Fig. 5 represents the same section of the lot which was soaked with the soluble soaking oil. This shows fewer broken filaments and a more perfect stitch.

Another cause of broken threads or fuzz in stockings is the substitution of other methods for backwinding. This is especially true of fine-gauge goods. So far few knitters have been able to eliminate backwinding with a suitable emulsion in the knitting of fine-gauge stockings. Backwinding makes the silk more pliable and lubricates the threads, so that none are broken.

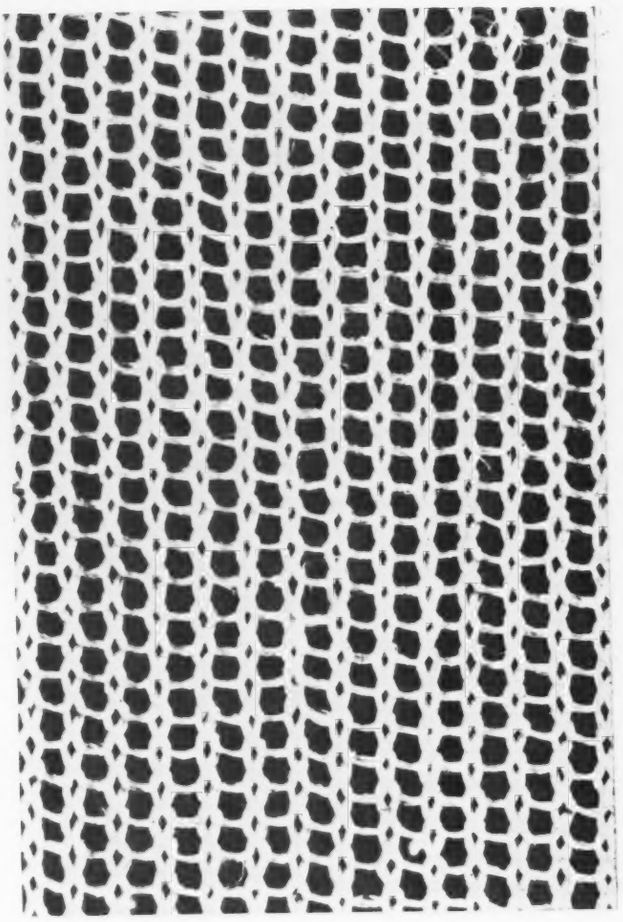


Fig. 4. Many broken filaments are present in hosiery made from improperly soaked silk

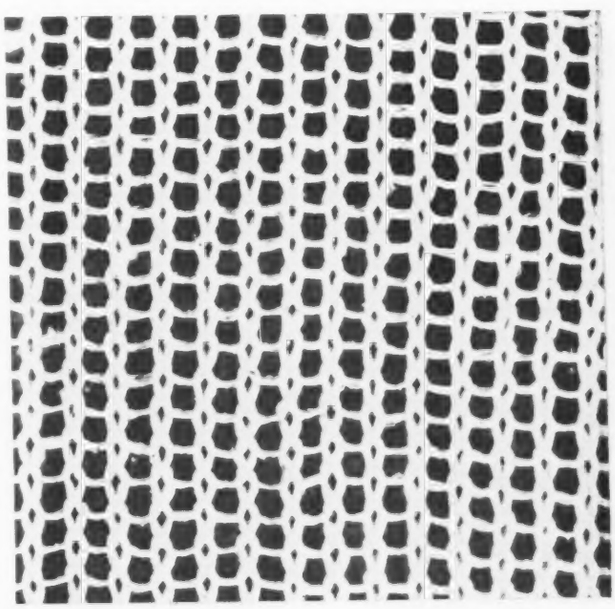


Fig. 5. Hosiery made from silk treated with a good soaking oil has few broken filaments

OVERSEERS' ROUND-TABLE

THIS department offers a new subject for discussion each week and gives readers' comments on problems introduced during previous weeks. The subject which was opened four weeks ago is closed this week and a summary of contributed ideas is given on opposite page

◆

A Whole-Day Holiday for Saturday?

Editor, Overseers' Round-Table:

I AM entirely in accord with Pete's suggestion that we have a five day work week in textile mills. I will even go further and say that we should have a 5 day, 40 hour work-week and the elimination of all night work except in times of war.

It is not so much a question of whether we should have time to spend on Saturday, but the condition which the textile industry faces, namely, overproduction. With improved automatic machinery and methods which have increased production at least 40%, there are enough mills in this country, running steadily on a 40 hour week basis, to supply all our needs. Until the government gets down to brass tacks and makes uniform laws for the 48 states we will continue to suffer.

Comparison of the hours of operation, prevalent today in both northern and southern mills with the hours run in the past will show that the trend is downward. Obviously, production continues greater than demand, so why not do the sensible thing and make adjustments before forced to by economic law? Cut out all this moving to north, east, south, or west to secure the benefit of longer hours and cheaper labor by having uniform laws which will stabilize prices and wages, decrease labor turnover, and give everyone a chance to work steadily.

Pete and myself may not live to see such changes, but our little Petes will.

BEN S. PIPER

The Overseers Discuss Their Own Overtime

Editor, Overseers' Round-Table:

I HAVE worked in plants where the overseers were paid "straight" time and given a vacation, and in other plants where overseer was paid for a full week if he made it. In neither of the two classes have I ever known of an overseer being paid for overtime.

Personally, I would feel just as right in asking my wife for "the second piece of pie" merely because I had bought her a much needed pair of shoes as I would feel in expecting pay for overtime.

Overseers are not paid as operatives and should not expect the minute consideration for overtime which is given the operative. When an overseer begins to think more of his pay check than his job he is just about ready to be shifted to the loose pulley. For example, I was employed by a super who was a personal friend. When a vacancy occurred in one of the departments I naturally expected the assistant overseer to be promoted, but the super told me, "that man would have been promoted long ago if he didn't stand in

Suggestion Boxes Are

"YOU all know," Superintendent Chase addressed the overseers, "that many large industrial plants in other lines, as well as a number of textile concerns, have been pretty well sold on the idea of having a suggestion box, or boxes, conveniently located in the plant. The plan, of course, is to encourage anyone who thinks he has a method of making a certain operation more efficient to write it out and drop it in the box. A jury then examines the suggestions and investigates those which seem to offer possibilities. In many cases a money prize is given for an acceptable suggestion. I believe that, in the way the plan is usually worked out, the person making the suggestion uses a number, or symbol. Do you think that such a plan would be of any benefit to us?"

"I certainly do," Pete spoke up, "because it offers a method of assuring everyone that he, or she, will personally get credit for a bright idea. I don't like to dwell on an unpleasant topic, but you all know of instances where someone makes a suggestion to a superior and is turned aside only to find out later that the suggestion has been put into effect. I honestly believe that in most of these instances there was no deliberate stealing of an idea; it just happens that the superior wasn't impressed at the moment and forgot all about it. Then at some later date a similar problem jogs his memory and the suggestion is pulled out from the back of his mind as a new idea."

"I can see that Bill is just itching to demolish my arguments," Pete continued, "so I'll add a little more. Often two people think of the same thing at about the same time. With a suggestion box and dated slips there is a simple way of proving who was the first and of avoiding any friction. In addition, I believe that anything which serves to encourage thinking along the lines of improvements is worth having. Certainly the operatives and younger second hands would feel entirely free to use an anonymous suggestion box

Discussed

where they would hesitate to speak to the overseer for fear that the suggestion would show up a lack of real knowledge. Now you can have your say, Bill."

"I really haven't much to say," Bill responded, "except the relatively simple statement that I don't approve. Can you imagine me running to a suggestion box when I discover a way to save money in my department? I get paid to think of new methods and to put them into effect. Pete speaks about encouraging those who have not had a great deal of experience. He believes that they may often have a suggestion of value but hesitate to speak of it as they are not sure of their grounds. If the overseer has a little sense he can handle such cases far better than a suggestion box. He can encourage everyone to come to him and then, by listening patiently, often quietly point out defctive thinking and really help the operative. The suggestion box is just another device which removes what I call the element of human contact and I'm against it."

◆

Do *you* think that a suggestion box is beneficial?

Overseers and others are invited to discuss this and other questions brought up in the super's talks. Letters accepted and published will be paid for without regard to length. Brevity is desirable.

his own light." In explanation he told me that the man was efficient but his world centered around the pay envelope.

I'd much rather take my chances on making my place secure with the company than spend the time thinking of pay for overtime. "LONG TOM"

Editor, Overseers' Round-Table:

I AM of Bill's opinion that an overseer should not think of receiving additional pay for overtime, for, when you think of it, what are an overseer's working hours?

My answer to this is that an overseer should have no specified hours, for his whole concern should be with his work, and the mill which employs him to make the best possible product at the minimum cost. Therefore, whether he works 50 hours or 72 he is only satisfying himself and his employers that he has a genuine interest in the job. A man who assumes the position of overseer and thinks that his work terminates with the whistle will not get far.

From the time I was second hand—and this was not a salaried job—I have never thought of the whistle, but have simply done my work and, when satisfied that it was correct, left the mill. I have found that it worked to my best advantage and I have never regretted the hours I spent after the regular working day.

If a lot of men who hold executive positions in textile mills would show more interest in their work we would not hear so much about liquidation and the ills of our industry.

HENRY HORN
Franklin Weaving Co.

Question of Punching the Time Clock

Editor, Overseers' Round-Table:

I DO not think that a time clock is desirable, at least not in the cotton mill where it is so simple to keep an eye on everyone without the trouble and expense of a clock.

At any rate, if the firm desires clock punching, the overseers should punch also. Any man who would object does so merely because he is afraid of his time being checked.

An overseer should be the most regular and punctual person in the department, that he may set an example for others, so if the clock is installed there is no reason why he should not punch it. A. COOPER

Editor, Overseers' Round-Table:

IN MY opinion there is no sense in having an overseer who is on salary punch a time clock, since he is not paid for overtime or docked for lost time.

On the other hand, if he is not on salary, he should punch a clock to keep his time straightened out.

FRANCES J. MCNEICE

◆

Summary of Discussion on Setting Rates of Pay

The question of whether the overseer should set the rate of an operative's pay, in such cases where a standard rate did not exist, or whether such a function should be entirely in the hands of the super or management failed to bring out many clear-cut differences of opinion. The general reaction was that the management should endeavor to settle all such questions, with the overseer in a consulting capacity. Relatively few of the contributions said either that the overseer should not be consulted at all or that he should have entire authority.

NEWS about MEN

LUCIUS B. CRANSKA, president and treasurer of the Cranska Thread Co., Worcester, Mass., headed a delegation from that plant which attended the 50th anniversary celebration of the founding of the Floyd Cranska Co., at Moosup, Conn., on Sept. 6. Mr. Cranska is also president and treasurer of the Moosup company.

FRANK L. MILLER was elected president; F. L. UNDERWOOD vice-president; E. Y. CHAPIN secretary; T. N. VAN DYKE treasurer, and G. D. BRISTOW assistant secretary-treasurer at the recent annual meeting of the stockholders and directors of the United Hosiery Mills Corp., of Chattanooga, Tenn.

F. H. WILLARD, president of the Graton & Knight Co., Worcester, Mass., was the principal speaker at a banquet held this week by the Troy (N. Y.) Industrial Commission in that city.

●

H. C. FINCH, president of the Broadalbin (N. Y.) Knitting Co., and wife, were the recipients of many gifts at a celebration held last week at their summer home in commemoration of their 49th wedding anniversary.

J. J. SHEA, president of the Troy (N. Y.) Garment Co., has been appointed assistant superintendent of industries at Auburn prison.

JOHN ROSSIE, president of the Rossie Velvet Co., has been elected president of the Groton (Conn.) Savings Bank.

HENRY J. JANSSEN, vice-president of the Berkshire Knitting Mills, Reading, Pa., MRS. JANSSEN and daughter HELEN have just returned home from a tour of Europe where they spent the summer months.

H. E. MACHOLD, vice-president of the Skenandoa Rayon Co., Utica, N. Y., has been selected as a delegate to the Republican State Convention from Jefferson County.

JOHN F. TINSLEY, vice-president and general manager of the Crompton & Knowles Loom Works, Worcester, Mass., and THOMAS H. GAGE, a director of the same corporation, have been appointed as arbitrators by the American Arbitration Association, New York, to settle commercial disputes arising in that section.

D. B. MCBEE, formerly vice-president and director of Amalgamated Silk Corp., has joined the fabric sales department of Celanese Corp. of America, New York.

STUART F. BROWN, vice-president and treasurer of the Whitinsville (Mass.) Spinning Ring Co., and MRS. BROWN have sailed from Boston on the S. S. "California" for a six weeks' vacation trip to Europe.

I. C. MILNER, executive vice-president and general manager of the Gate City Cotton Mills, Atlanta, Ga., is back at his desk following an operation for appendicitis that has kept him confined to his home for three weeks.

J. M. BEVERLEY, vice-president of the Ballston (N. Y.) Knitting Co., is head of a committee carrying on a campaign for the benefit of the Benedict Memorial Hospital in that city.

L. F. HARDER, vice-president of the High Rock Knitting Co., Philmont, N. Y., was a member of the committee which conducted the annual meet of the Lebanon Valley Hunt Club near that place.

C. FREDERICK BUTTERWORTH, treasurer of the Draper Corp., Hopedale, Mass., and MRS. BUTTERWORTH have returned from a two weeks' vacation at York Beach, Maine.

J. N. CHRISTIE, formerly treasurer, Ackroyd Bros. (Boston), Ltd., has become associated with the Chautauqua Worsted Mills, Jamestown, N. Y., as buyer of wools.

H. L. HORTON was recently elected to the board of directors of Lillian Knitting Mills Co., Albemarle, N. C., succeeding the late A. C. HEATH.

JOHN T. THORNE, of Fayetteville, N. C., has been elected president of the North Carolina Cotton Growers' Cooperative Association for the coming year. He succeeds DR. B. W. KILGORE, of Raleigh, who has been president since 1924. U. B. BLAULOCK was re-elected vice-president and general manager. He has served the organization in this capacity since its beginning.

P. & A.

John A. Spooner, merchandise director of the Viscose Co., who has been elected president of the Rayon Institute, succeeding Chester A. Bassett, Jr. The Institute's program will continue to stress quality merchandise

DR. W. C. HAMRICK, head of the Hamrick group of textile mills at Gaffney, S. C., has been elected chairman of the board of directors of the Gaffney branch of the People's Bank of South Carolina.

JOHN L. BURTON, former agent of the Nashawena Mills, New Bedford, Mass., who at present is in St. Luke's Hospital, New Bedford, Mass., suffering from a heart ailment, recently received a letter of sympathy and cheer from President Hoover. The friendship between President Hoover and Mr. Burton dates from war times, when the mill agent originated an important airplane fabric. Mr. Burton recently renewed acquaintance with the President as a member of the textile committee that went to Washington for the tariff hearings.

N. M. CRANFORD has sold his interest in the Asheboro Hosiery Mills, to C. C. CRANFORD and will devote his time to other lines of business in the future.

W. F. HALL, JR., of Statesville, N. C., formerly associated with Charlotte (N. C.) Knitting Mills and Statesville (N. C.) Knitting Mills, has joined the sales organization of Geo. B. Pfingst, Inc., of Philadelphia, Pa., and will cover the entire southern territory for the firm.

FRED LEVINTHAL has tendered his resignation as sales manager of the cutting up trade division of C. K. Eagle & Co., Inc., New York.

W. C. BOBO, who recently came from Greenville, S. C., to become general manager of the Lad-Lassie Mills, at Anderson, succeeding E. P. COFIELD, has leased the home of J. W. LINLEY, at Anderson, and will move his family from Greenville during the next few days.

OSCAR B. GRAICHEN, former cost accountant for the Lancaster Mills, Clinton, Mass., who last December with representatives of Lockwood, Greene & Co., Inc., Boston, went to Russia to give instruction in figuring textile production costs in textile mills being established by the Soviet, spoke of his experiences before the Rotary Club of Clinton, on Sept. 9. Some of the party may return to Moscow to work another six months, leaving the first of the year.

●

HENRY H. ANNING, recently with Commercial Fibre Co. of America, Inc., has been appointed sales manager in charge of the New York office of American Enka Corp., as announced by C. M. CARR, vice-president of the American Enka Corp.

W. F. HEDGES is general manager of the Silver Knit Hosiery Mills, the former Rex Tex Hosiery Mill, Kingsport, Tenn., which was recently purchased by MILTON SILVER, High Point, N. C.

L. M. STODDARD, who has been associated with the Belding-Heminway Co.,

New York, for the last 26 years, has resigned as general sales manager.

H. Y. McNeil, general manager of the Fonda (N. Y.) Glove Lining Co., has returned after spending the summer at Lake Pleasant.

James F. Gable, general manager of the Hamilton Woolen Co., Southbridge, Mass., represented that company at the style show held at Atlantic City, N. J., last week, where it had an exhibit.

John F. Reardon, agent for the Grosvenor-Dale Co., North Grosvenor Dale, Conn., has been elected a delegate to the Republican state convention to be held in Hartford, Conn., Sept. 15-16.

Hubert J. Watson, assistant manager and assistant treasurer of the Watson-Williams Mfg. Co., Leicester, Mass., and Mrs. Watson sailed from Liverpool on the S. S. "Samaria" on Sept. 3, on their return from a three months' honeymoon tour of Europe.

Frank H. Coker, district sales manager, DuPont Rayon Co., Charlotte, N. C., and Ruth Elizabeth Nuchols were married in Greenville, S. C., Sept. 2.

James J. Cassidy, head clerk for the A. D. Windle Co., Millbury, Mass., and Celina Crepeau, also of that town, are to be married on Sept. 16.

W. H. Gibson, Jr., formerly manager and superintendent of the Aileen Mills, of Bisco, N. C., has been appointed assistant general manager of the Mansfield and Jennings Cotton Mills, at Lumberton, N. C.

Frank Petrea, superintendent of the Swift Mfg. Co., of Columbus, Ga., vice-general chairman of the Textile Operating Executives of Georgia, will lead the discussion on weaving at the fall meeting of the organization, which will be held Sept. 19, at the Georgia School of Technology. P. L. Lindsay, chief master mechanic of the Thomaston (Ga.) Cotton Mills, will have charge of the discussion of mechanical problems, and George Elliott, of the Gainsville plant of the Pacolet Mfg. Co., will have charge of the slashing discussions.

Charles Turner, formerly superintendent of Peerless Cotton Mills, Thomaston, Ga., is now assistant superintendent of Northern Bag Mills, Nashville, Tenn.

W. H. Ferguson has recently assumed his new duties as superintendent of the cloth room at the Manetta Mills, at Monroe, N. C.

S. I. Parker, for the last 11 years superintendent of the Proximity Print Works, of Greensboro, N. C., has resigned to become superintendent of the Clearwater (S. C.) Mfg. Co.

R. L. Wood, superintendent of the Aragon-Baldwin Mills, of Chester, S. C., has been promoted to general superintendent of the Aragon-Baldwin group, with headquarters in Chester.

Mrs. Birta Weatherbee, principal of the Callaway Mills elementary schools, La Grange, Ga., has been elected president of the association of southern textile social workers.

Frederick W. Ballinger, who was with the United States Worsted Corp. for 25 years, is now engaged with the Stillwater Worsted Mills, according to information received from Greenville, S. C.

David C. Mahaffy, of Pulaski, N. Y., who has owned and operated a carding mill at Pulaski, N. Y., for the last 70 years, observed his 83rd birthday on Sept. 2.

◆

Appointed New England Editor

James A. Austin has been transferred from the New York office of *Textile World*, to the Boston office, located in the Statler Building, where he will assume the duties of New England Editor. Mr. Austin's background of both mill and sales experience in the textile industry, plus his editorial field work in the New England territory since joining the staff of *Textile World*, fits him admirably for his new and broader duties.

◆

Frank William, former maintenance man for the Hamilton Woolen Co., Southbridge, Mass., later of New London, Conn., has returned to Sturbridge, Mass., to live.

Herman B. Temke, of Greensboro, S. C., was elected president of the Southeastern Association of Waste Material Dealers at a meeting of the organization held recently.

T. H. Courtney, formerly of Charlotte, N. C., has accepted a position with the shipping department of the Rock Hill (S. C.) Printing & Finishing Co.

J. N. Jones has resigned as second hand in spinning at the Manville-Jenks Co., at Gastonia, N. C., to become night overseer of carding and spinning at the Phoenix Mills, at Kings Mountain, N. C.

R. F. Murray, who has been second hand in spinning at the Mauney Mills, of Kings Mountain, N. C., has been promoted to boss spinner at the same plant.

George D. Barslow, for 51 years employed by the Whitin Machine Works, Whitinsville, Mass., the last 12 years upon speeders, has resigned his position and been placed upon the retirement list.

Obituary

Charles G. Hill

Charles G. Hill, chairman of the board of directors, Amazon Cotton Mills, Thomasville, N. C., died at his home in Winston-Salem, N. C., Sept. 5, after an illness of long duration. He was born in April, 1878, and after his graduation from the University of North Carolina, he was connected with the tobacco and furniture manufacturing industries of Winston-Salem. He recently resigned as president of the Amazon Cotton Mills. Mr. Hill was married in 1905 to Mary Ella Cannon, of Concord, N. C., daughter of the late J. W. Cannon, pioneer textile manufacturer, and four of their five children survive: Mrs. Kenneth Hogan, Charles G. Hill, Jr., Susan and Jane Hill.

Charles Iceman

Charles Iceman, for many years prominently identified with the textile industry in the Carolinas, died in a hospital at Monroe, N. C., Sept. 7, following an acute heart attack. He was 65 years of age. Mr. Iceman was a native of Maryland but moved to South Carolina while still a young man and became an important textile manufacturer. He went to Monroe about 25 years ago and was instrumental in organizing several cotton mills, including the Icemorlee mill. He retired from active business a few years ago. In addition to his widow, who was Miss Mollie Tatum, of South Carolina, he is survived by five daughters.

Edward L. Shuford

Edward Lindsay Shuford, hosiery manufacturer of Hickory, N. C., notice of whose death was recorded in these columns two weeks ago. was born in High Point, N. C., Aug. 8, 1863, son of the late A. L. and Adelaide Lindsay Shuford. Mr. Shuford removed to Hickory in his boyhood, and early became active in a variety of business enterprises. He built one of the first cotton mills in the neighborhood, and at the time of his death was operating the Magnolia Hosiery Mill at Hickory. He also was influential in civic affairs. His widow, five children, three brothers and two sisters survive.

Thomas S. Bangle

Thomas Sydney Bangle, for the last two years night superintendent of the Proximity Mfg. Co., Greensboro, N. C., died in that place Sept. 6 from angina pectoris. Mr. Bangle, who was 52 years old, was born near Concord, N. C. He came to Greensboro more than 30 years ago to become associated with the Cone mill interests in a minor capacity, and continued his connection with the company continuously until his death. His widow, four daughters and one brother, James A. Bangle, also connected with the Proximity plant, survive.

James T. Barnett

James T. Barnett, 78, for the past 28 years connected with the Gate City Cotton Mills, having held the position of secretary and treasurer, died at his home in Atlanta, following a short illness. He is survived by his widow, one son and one daughter.

NEWS about MILLS

Cotton

Fairfax (Ala.) Mills are installing several roving frames, the work being done by the Southeastern Machine Co., Atlanta, Ga.

Adams Mfg. Co., Putnam, Conn., will hold liquidation sale of mill, real estate, dwellings, building lots, machinery and equipment at 10 a.m., Sept. 25. Announcement is made by Samuel T. Freeman & Co., auctioneers, of Philadelphia.

Georgia-Kincaid Mills, Griffin, Ga., recently placed a contract with the Bahnson Co., Winston-Salem, N. C., for the installation of additional humidifiers in weaving, winding and warping rooms.

Pepperell Mfg. Co.'s Lindale, Ga., plant, which has been operating on a 40-hour schedule for the last two months, is expected to go on a 50-hour per week schedule before long, and in case orders continue to come in as they have in the last two weeks, the plant will probably be put on a full-time operating schedule.

Lindale Textile Mills, Rome, Ga., will be in full operation again before winter, according to H. P. Meikleham, agent for the Pepperell Mfg. Co. For the last two months the Lindale Mills have been on a 40-hour short-time schedule, but orders are coming in at present and if they continue to increase, the mills will soon be put upon a 50-hour basis.

Strickland Cotton Mills, Valdosta, Ga., resumed night operations at the plant Sept. 8, putting on a night shift of 150 men, thus doubling the number of operatives at the mill. The night operations will continue through January, and may be permanent.

Dwight Mfg. Co., Chicopee, Mass., sheetings, closed operations Sept. 2 for an indefinite period. The business will be transferred to the Somersworth, N. H., plant.

Durfee Mills, Fall River, Mass., have leased their No. 3 mill, consisting of a six-story unit, to the Auerbach Bathrobe Co., 37 West 26th St., New York, which will occupy for a branch plant.

***Union Cotton Mfg. Co.**, Fall River, Mass., in process of liquidation, has completed the production of all stock in course of manufacture, and the plant has been closed, releasing the employees.

***Monument Mills**, Housatonic, Mass., have announced that salaried workers are the only ones in their organization affected by the wage change, including the president, management, office employees and heads of departments. The day help and laborers in the plant are not affected in the wage reduction.

*Indicates previous mention of project.

Otis Co., Three Rivers, Mass., is now operating two sets of equipment on its raw stock, using Breton Minerol process of the Borne Scrymser Co.

Great Falls Mfg. Co. (Mill No. 2) now owned by **Dwight Mfg. Co.**, Somersworth, N. H., was destroyed by fire on Sept. 8, with loss estimated at approximately $100,000. The plant has not been used for manufacturing purposes for some time but had been used for storage of machinery and other supplies. According to Henry C. Harden, agent, the property was not insured. The big $4,000,000 cotton plant was saved by prompt arrival of nearby fire departments.

Cape Fear Cotton Mills Co., Fayetteville, N. C., which has been idle for several weeks, recently resumed operations. Equipment consists of 5,760 spindles running on tire cord.

Myers and Hanover Mills, Gastonia, N. C., are operating on half-time, running one week and standing idle a week, thus giving the employees two and one half days' working time each week.

Erlanger Cotton Mills Co., Lexington, N. C., is installing 21 new spinning frames which will increase production when placed in operation.

Diamond Cotton Mills Co., Salisbury, N. C., announces completion of winding machinery addition. This department will be put into operation with an entire battery of new winders.

Langley (S. C.) Mills have resumed a schedule of operations every week after operating every other week for some time.

Watts Mills, Laurens, S. C., have installed additional cards and combers and overhauled the carding department.

Neely-Travora Mills, Inc., York, S. C., idle for some time past, are said to be arranging for early resumption of operations on a reduced basis, working up gradually to close to normal.

Carolina Cotton & Woolen Mills, Fieldale, Va., are working on a four-day-a-week schedule.

Crompton-Shenandoah Co., Waynesboro, Va., a branch of Crompton (R. I.) Co., manufacturing velours and corduroys, is operating with a 30% reduction in working force.

Canadian Cottons, Ltd., St. John (N. B.) Can., have closed their local Cornwall mill for an indefinite period. The local York mill of the company will continue in service until further notice, with output devoted exclusively to yarns for use at other plants of the company.

Wool

Old Town Woolen Co., Inc., Guilford, Me., is working on a full-day schedule turning out the heavy woolen blankets in which it specializes. Maurice Gray, agent, announces that a night crew is to be put on immediately. Motorists from widely scattered sections of the country have been liberal patrons of the company's mill store which handles seconds.

Piscataquis Woolen Co., Guilford, Me., is running on an overtime schedule. Robert Houston, the agent, states that a recent week's yardage of cloth was the largest in the history of the plant. Although other Maine woolen mills have closed, business has not been curtailed at this plant.

S. N. & C. Russell Mfg. Co., Pittsfield, Mass., are running out stock and expect to suspend operations indefinitely about the middle of September.

George H. Gilbert Mfg. Co., Gilbertville, Mass., has been shut down for several days while employees cleaned out the basin and raceway of the canal leading to the plant.

Perryville Woolen Mills, Inc., Dudley, Mass., resumed operation of their spooling department on Sept. 4, as an auxiliary of the Keegan Mills, Wilsonville, Conn., after the plant had been closed for several months.

S. F. Scott & Sons, Inc., Uxbridge, Mass., have inaugurated a two-shift plan for the daily operation of their Elmdale Mill, each of six hours from 6 a.m., to noon and 6 p.m.

Ware (Mass.) Woolen Co. resumed operations Sept. 8 and will be on full-time schedules shortly, according to Fulton Rindge, manager. The mills have been on greatly curtailed schedules for a long time.

***Thorndike Co.**, West Warren, Mass., is selling its woolen machinery at private sale and will also shortly dispose of its idle structures. Six woolen carding machines of the 3-set type have been sold to a Lowell (Mass.) mill.

Chatham Mfg. Co., Elkin, N. C., wool and wool mixed blankets, which has been running on short-time has started on a full-time basis, having received a quantity of orders.

Hampton Looms of Virginia, Inc., of Bedford, Va., has been issued a charter with maximum capital 2,000 shares of common stock, without par value and $800,000 common and preferred. Landon Lowry, of Bedford, is president. The purposes of the company are to own, operate and control woolen mills. Landon Lowry, of Bedford, is attorney for the company.

Senior Worsted Co., Milton (Ont.) Can., is installing new machinery at its mill and will increase capacity at an early date. The plant has been running on a double shift basis for some time past and will continue with the extra working force.

Knit

Aycock Hosiery Mills, Bridgeport, Ala., are closing their plant indefinitely. The machinery may be dismantled and removed to plant of the company at South Pittsburg, Tenn. The plant has 100 knitting machines.

Real Silk Hosiery Mills, Indianapolis, Ind., are maintaining a capacity schedule with day and night working forces, and will hold to this basis for an indefinite period. Other plants of the company are also running full.

American Textiles, Inc., are transferring the hosiery equipment at the Bay City, Mich., plant to Mt. Vernon, Ill., which when installed will practically double the capacity of the plant, according to President D. L. Galbraith. No plans have been made for disposing of the building that housed the hosiery department at Bay City, as the company may later use it for making underwear.

***Corinth (Miss.) Hosiery Mills** have awarded contract for building their first unit to H. A. McGuire, of Memphis, Tenn., according to official announcement. The building will be one-story, 197x225 ft. J. E. Sirrine & Co., mill architects and engineers, Greenville, S. C., prepared plans and specifications for the new mill, which is said to be the first unit of a large hosiery plant to be established at Corinth.

New Hampshire Mills, Manchester, N. H., are running on a full-production basis, and are said to have orders on hand to insure continuance of this schedule for about six months to come.

Rivoli Silk Hosiery Co., Plainfield, N. J., is holding in abeyance plans for a new one-story addition, 52x72 ft., as well as a second story on existing mill, 52x 152 ft., for which A. M. Korff, 203 Park Ave., Plainfield, is architect.

Root Mfg. Co., Inc., Cohoes, N. Y., woolen and merino flat and ribbed underwear, has orders booked which will insure full-time operations for some time.

Bailey Knitting Mills, Fort Plain, N. Y., manufacturing men's balbriggan underwear, bathing suits and sweaters for the last 30 years, will liquidate early in November.

Augusta Knitting Corp., Whitesboro, N. Y., is now running overtime in some departments with additional workers.

Willis Hosiery Mills, Inc., and the **Hoover Hosiery Co.,** Concord, N. C., are running a full day and night schedule —the former on men's half-hose and the Hoover company on women's full-fashioned hosiery. They expect to continue on this basis for some weeks to come.

Hollar Hosiery Mills, Hickory, N. C., has let contract to J. R. Killian for erection of a mill building, 142x63 ft., costing approximately $20,000. A sprinkler system will be installed.

***Shuford Hosiery Mill,** of Hickory, N. C., is now in operation. This company is made up of the **Conover Knitting Company** and the **Longview Knitting Mills,** which have been merged.

Pilot Full-Fashioned Hosiery Mill at Valdese, N. C., is now operating on a full-time schedule, and officials of the company are expecting a good demand to start early in the fall, it is said.

Gotham Silk Hosiery Co., Philadelphia, Pa., has been running about 70% of normal. Practically all jobs are doubled and are running two shifts of 40 hours each per week.

Northwood Hosiery Co., Philadelphia, Pa., is said to be contemplating the establishment of a branch mill at Greensboro, N. C., for the production of full-fashioned hosiery.

Powell Knitting Co., Philadelphia, Pa., men's and women's cotton, wool and worsted hosiery, has posted a notice of reduction of 20% in the wages of all operatives, effective at once.

Triumph Hosiery Mills, Inc., York, Pa., have awarded contract to Dietz A. Smith, of York, Pa., for addition to mill totaling 10,000 sq.ft.

Silk

William Skinner & Sons, Holyoke, Mass., resumed operations Sept. 8, after three weeks' suspension. The mills will operate four days a week.

Tenakill Mills, Inc., Tenafly, N. J., recently chartered with a capital of $100,000, to operate a local silk mill, will be represented by Wright, Vanderburgh & McCarthy, 210 Main St., Hackensack, N. J., attorneys. Charles J. McCarthy, Bogota, N. J., is one of the incorporators.

Kattermann & Mitchell Co., Stanley, N. C., textile manufacturer, is said to be arranging for the immediate resumption of operation on a 60-hour week schedule following a 30-hour week schedule for the last month.

Quakertown (Pa.) Silk Mills, Inc., recently organized with a capital of $50,000 and 150 shares of stock, no par value, to operate a local throwing mill, will be represented by Manuel Tannenholz, 1816 West Lindley Ave., Philadelphia, Pa., who will be treasurer. Carl Stessman and Jacob Schmitt, 1226 West Broad St., Quakertown, are interested in the new company.

Rayon

American Enka Corp., Enka, N. C., is running on a full-time production schedule with a quota of about 2,300 workers, less than regular working force at the mill.

Du Pont Rayon Co., Waynesboro, Va., which curtailed operation for a period of ten days, reopened on Sept. 11.

Finishing

Lowell (Mass.) Bleachery will suspend operations in the near future, according to a statement of the directors. Loss of volume of goods for finishing has resulted in the decision. The finishing done by the Lowell plant from the textile plants located there has been largely taken away owing to the closing of these plants and a sufficient volume of yardage to replace this business has not been secured.

Sturbridge (Mass.) Finishing Co., which had been operating three days a week has increased the schedule to four days per week with about half the force and no night work.

Palisade Piece Dye Works, Inc., North Bergen, N. J., recently organized, has leased the one-story brick mill on south side of 38th St., near the Bergen Turnpike, on site 115x260 ft., and will occupy for a local mill. The lease is for a period of five years, with option to purchase.

***Schulze Dyeing Co., Inc.,** Reading, Pa. In the equity proceedings of William Schulze and Emil O. Schulze, Judge P. N. Schaeffer has appointed Raymond S. Heckman permanent receiver for the company, authorizing him to conduct the business and make a report to the court on Dec. 4, 1930.

Cooley Finishing Co., Pawtucket, R. I., has arranged for increase in capital stock from $62,500 to $250,000.

Southern Bleachery, Inc. and **Piedmont Print Works, Inc.,** of Taylors, S. C., jointly, are to purchase **Rockland Finishing Co.,** of Garnerville, N. Y., which has 20 printing machines and 35 dyeing machines and a daily capacity of 200,000 yards.

Miscellaneous

Southern Bedding Co., Inc., Lexington, Ky., is planning to install new machinery for the manufacture of comforts, according to L. S. Cox, president.

Stevens Linen Works, Webster, Mass., resumed operations on a full-time basis on Sept. 9, after a month's shutdown for vacations and repairs.

Schlichter Jute Cordage Co., Philadelphia, Pa. Fire recently destroyed a warehouse unit at this plant, Trenton and Erie Aves. Plans are said to be under advisement for rebuilding at an early date.

Anawan Braid Co., Burrillville, R. I., recently formed with a capital of $50,000, to operate a local mill, will be headed by Frederick W. O'Connell, Cranston, R. I. Harold W. Thatcher and Ernest A. Jenckes, Cranston, are other incorporators of the company.

Pacific Coast Linen Mills, Vancouver, Wash., has been operating on part-time schedule, employing eight men in the retting and scrutching department. E. A. Kirkwood, of Belfast, Ireland, is expected to take supervision of the plant.

*Indicates previous mention of project.

Questions and Answers

We undertake to answer, free of charge, to the best of our ability, questions pertaining to textile matters received from any regular subscriber to TEXTILE WORLD. We do not undertake, however, routine analysis of yarn or fabric, or investigation involving unusual expense.

Inquiries should give the fullest information and data possible. In the case of damage to material, a sample should be sent. All inquiries must be accompanied by the name of the person inquiring, not for publication, but as evidence of good faith. The identity of those seeking information on technical subjects will not be disclosed.

Letters expressing opinions or voicing criticism are cordially invited. These will be signed by the correspondent's name unless the letter itself contains a request that the name be withheld.—EDITOR.

Numbering Braided Banding

Technical Editor:

In a reference book which I possess there is a chapter entitled "Numbering Braided Banding." I notice that this chapter stipulates that braided banding is always made 16 strand; that it is usually customary to use two-ply yarns, sometimes 10s and sometimes 20s; and that scheduling of sizes begins with size No. 30.

I have a sample card from a large manufacturer of this material and find that it starts with size No. 12, and also has sizes Nos. 18 and 24 in addition to the schedule of sizes from 30 up which the reference book lists.

I am writing to ask if you can advise me as to what sizes of yarns are used to make these three smaller sizes of banding, No. 12, No. 18, and No. 24, as I find from picking the end of the samples to pieces that in each case a two-ply yarn is used, yet each sample of braided banding is smaller in diameter than its next larger number in size.

If you can give me any data regarding the size of yarn for these three sizes of banding, I shall appreciate it very much. (7296)

Braided banding is generally made 16 strand, or more correctly speaking, on a 16-carrier braider; but this need not necessarily be so. The reason is that, wearing qualities considered, the 16-carrier machine will produce this material the most cheaply. The product of a 24-carrier or a 32-carrier machine would be at least as efficient.

The size of the yarns used in the different-numbered bandings need not be uniform throughout the trade, but may vary with the different manufacturers. For instance, satisfactory bandings of the different sizes may be made on 16-carrier braiders with yarns shown below, or equivalent yarns may be substituted.

Banding	Yarn	Ends of Bobbin
No. 12	20/2	1
No. 18	16/2	1
No. 24	12/2	1
No. 30	20/2	2
No. 48	16/2	2
No. 64	12/2	2
No. 80	16/2	3
No. 96	12/2	3

You may determine the count of the yarn in the samples you have according to the following:

Measure off a 2-in. piece of braid and weigh it carefully on a fine grain scale. Then extract two or three strands of yarn and, after moistening them slightly to remove the kinks, measure them under tension on a fine scale. This gives the "straight length" of each thread. The single counts may then be determined by the following formula:

$$\frac{\text{Number of strands of yarn in sample} \times \text{"straight length"} \times 7000}{\text{Weight in grains sample} \times 36 \times 840}$$

If the yarn is two-ply, the result of the foregoing equation should be multiplied by 2; if three-ply, by 3; etc.

840 is the standard for cotton
36 is in. per yd.
7,000 is number of grains per lb.

◆

Finishing Sweater Fabric

Technical Editor:

Enclosed you will find two swatches of knitted fabric which are intended to be made into coat sweaters. The one marked "A" was finished by another mill, while the one marked "B" was finished by us. The cloth coming from the knitting machine was supposed to be the same in both cases as it was made by the same mill. Therefore the difference in handle and appearance is entirely due to the finishing. You will agree with both our customer and ourselves that the sample marked "A" is far superior to the one finished by us. We would like to duplicate their finish. Our cloth is too soft and mushy, also too fuzzy. Evidently the difference must be in the kind of soap or fulling oil used, and strength of same.

Specifications follow: 20.5 oz. per yd. in the oil; loss in weight during finishing, about 18 to 20%. Yarn is supposed to be made almost entirely from pulled wools. It does not waste much in fulling. Width from knitting machine, 74 to 76 in.; finished width, 54 in. (27 in. tubular). You will note from the above that there has to be a greater yardage delivered than received in order to get the desired finished weight of 14.75 to 15 oz. off the dryers, which would show about 15.6 to 15.8 oz. after the normal regain in moisture has taken place. We find that a 45-lb. piece picks up from 2.5 to 3 lb. of moisture above the weight from the dryers.

We have processed as follows: Scour in good-bodied soap and soda ash. Extract and run in fullers single draft. Trap off, roll tied to hold length and stretch. Some pieces were fulled with fulling oil and soda ash; others were fulled with a light soap and soda ash. We have tried increasing the amount of ash to try to get a harsher feel, but did not notice much difference. We have run with the doors open so that the fabric would not heat up too much and felt, as the elasticity noted in the "A" sample is required. We have trouble in getting them down to width and they have been running 3 to 4 hours. After fulling we scour, extract, dry tubular, calender, examine, measure, weigh, and check ounces per yard, and if O.K., ship.

Any suggestions to give the proper finish would be appreciated. (7297)

The inferior finish of sample *B* is due to improper treatment of this fabric. By correcting the methods, you will be able to duplicate the finish of sample *A*.

First of all, make up a solution containing 1½ oz.

alkali, 1 oz. soap, and 8 oz. fulling oil to the gallon. Place the soap and alkali in a tank, cover with water, bring to the boil, and allow to simmer for at least five to six hours. When ready to fill, turn on water until tank is half full, then add the necessary fulling oil, allow the steam to agitate the mixture, and then proceed to fill the tank as usual.

Cloth coming from the knitting machine at 20.5 oz. per yd. to finish 15.6 to 15.8 oz., with an average loss of 18% to 20% in grease weight, should show an approximate gain of 5% in length when finished.

Take your knitted cloth to the washer; add enough of the above solution to your set of four or eight pieces to wet out the fabric thoroughly; run for 10 or 15 min. without adding water; then take the pieces to the extractor. When extracting for fulling, it is not necessary to extract very hard. Load the fulling mills in the following manner: sew two pieces in one string and run in the fuller in four drafts. This may seem rather difficult to the operator, but after some practice it becomes very simple. To simplify methods for the operator, it might be well to measure the two pieces together, and mark off by tying a string about one fourth of the piece, so as to be sure to tie the end of the piece at the proper distance. When this has been accomplished, another piece should be put in the same side and in the same manner, making in all eight drafts on one side of your mill. The added amount of cloth in each side, together with the shortening of drafts, will force your width down very quickly and should reduce your fulling time two-thirds.

The fact that you scour first, then full about three to four hours, then scour again, is the reason for all the faults of this fabric. Shrinkage can be governed while fulling by this method, but it will be necessary to watch your width carefully since it will move very rapidly. When fulling has been accomplished, scouring should be done in the following manner: Put the pieces in the washer, add enough of the solution to have the soap show a good lather, run for 20 min., rinse for 45 min. in lukewarm water, rinse 15 min. in cold water, extract and finish as usual.

If the fabric is not scoured sufficiently, it is necessary to add a trifle more solution while fulling. Again, if eight pieces prove to be too much for the capacity of your mill, take two pieces, doubling up each piece, making four drafts instead of eight. Bring your width down 2 or 3 in. below the finishing width to attain elasticity. Full pieces to 50 to 51 in. in width, allowing the length to gain the necessary amount wanted.

◆

Paste for Printing Blankets

Technical Editor:

We would like a formula for making a black or dark-colored paste for hand-printing woolen blankets after finishing. The print must stand a fair amount of laundering and not greatly injure the fabric. (7300)

The most practical ink for this purpose is the mixture used for laundry marking ink. This is made by dissolving nigrosine base in aniline oil and adding a small amount of lamp black. It cannot be made from spirit nigrosine or water-soluble nigrosine, but only from the base, which is the original product before sulfonation. You can buy this already made (as well as a red shade which is almost as fast) from the laundry-supply houses.

THOUSANDS of inquiries are handled annually by the Technical Editors. In order that as many readers as possible may benefit from this service, we select problems of general interest for publication each week.

There is a hard insoluble tar which is the final residue of coal-tar distillation; this may be put into solution by heating it for a long time with xylol, when a thick varnish-like mass results. This material can be used for marking even cotton pieces which are to be kier-boiled and bleached, as it is unaffected by all chemicals. We believe such a solution of coal-tar pitch in xylol is being sold as a resistant black enamel paint for metal work.

◆

Waterproof Finish on Shoe Thread

Technical Editor:

We are anxious to produce a waterproof finish on heavy glazed shoe thread. Will you supply us with information which will enable us to do this? (7290)

You do not state whether you wish a complete formula for producing a waterproof finish or merely a recipe that can be employed in connection with the sizing mixture you are now using. We are therefore supplying both. The first formula will make 50 gal. of size that will give a heavily glazed, waterproof finish on shoe thread: bluestone, 1 oz.; salt, 6½ oz.; borax, ½ lb.; coconut oil, 1 lb.; paraffine, 10 lb.; ground glue, 2½ lb.; yellow dextrine, 2½ lb.; tapioca flour, 9 lb.; potato starch, 9 lb. If you now have a satisfactory glazing recipe, make up a 25-gal. emulsion of 12½ lb. paraffine wax, 12½ lb. tallow soap, and 6 lb. of gelatin, and add it to your present sizing mixture.

◆

Full-Fashioned Hosiery Varies in Shade

Technical Editor:

We are enclosing herewith a full-fashioned stocking which we understand has been knit from 12-thread tram with 3½ turns per inch. We are at a loss to understand why the foot is of a darker shade than the leg. You will notice that the right heel tab, which is knit from the same cone of silk as the leg, is quite in harmony with the foot as far as shade is concerned, whereas the left heel tab, which is knit from a different cone of silk, shows a different shade to that shown in the right heel tab and foot; but is similar to the shade of the leg. On account of this, the knitter claims that the knitting machine cannot be blamed for the fault. In other words, he says any difference in the texture of the weave in the foot, as compared with the leg, is not responsible for the trouble.

It appears to the writer that the leg seems harsher than the foot. Do you think that the leg portion has been properly degummed? We shall appreciate your opinion as to the cause of this variation. (7293)

We have examined the sample of hosiery and find the

trouble to be purely one of different lots of silk being employed in making the leg and foot. We note that one heel tab checks with the sole of the stocking while the other checks with the leg. This is caused by the fact that two different cones of silk are required for making the leg at the point of heel tab, one cone being of the lot represented by the leg and the other of the lot represented by the foot. This condition is not necessarily one for complaint against the quality of the silk; and we find the quality in both conditions very good for the type of merchandise. Raw silk, even though of representative quality so far as evenness, cleanliness, etc., are concerned, frequently shows appreciable variation in its affinity for dyestuff. Again, one lot of silk may have something of a yellow cast while another may be white, and yet both lots may make the same satisfactory test so far as quality is concerned. Such lots, however, will not satisfactorily mix together. It is, therefore, of vital importance for the knitter to follow up each lot of silk carefully and to see that legs are always footed, as far as possible, with the same lot of silk.

In addition to this precaution, it is never advisable to keep unfooted legs in storage very long, as there is always considerable oxidation of the silk, especially after it has been run through the backwinding and knitting solutions. Legs that have been stored even for a few days and footed with the same silk employed in making the legs will show an appreciable difference between the fabric in the foot and leg if dyed promptly after the footing operation is completed. In such cases, where it is necessary to foot legs that have been aged for some time with freshly wound silk, it is always advisable to hold goods out of the dye until oxidation in the foot has had a chance to level up with that of the leg. Better still is to avoid having any legs ahead of the footers and as far as possible to see that both foot and leg, as well as heel, are made from the same lot of silk.

The knitter is right in his claim that the trouble is not caused by the machine; neither is the difference in the texture between the foot and the leg responsible for the trouble.

◆

Taffeta Is Cockled

Technical Editor:

We are enclosing herewith two samples of cockled cloth, marked No. 1 and No. 2, respectively. Sample No. 1 is a colored pure-dye drapery taffeta, and sample No. 2 is a pure-dye black chiffon taffeta. We should appreciate it very much if you will let us have your opinion as to what causes these cockles. (7299)

The samples submitted show plainly a cockled effect running crosswise on the material. Examination of sample No. 1, which is the colored, pure-dye drapery taffeta, discloses along the edge what appear to be small notches; the deeper the notch, the more pronounced is the cockle. This shows that the filling was pulled taut in the shuttle, instead of having a smooth, even let-off. Also, as the filling was stretched to a certain extent, it caused shiners, which show rather plainly. Before finishing, it might be difficult to see these defects; but after finishing, the taut picks draw in the material, causing cockles. In sample No. 2, the shiners are very evident; the cockles, however, are somewhat finer, due to the material being a lighter weave and slightly different construction.

Improper filling tension, the usual cause of these defects, may be due to any one of a number of conditions. For example, the tension devices may be worn; the fixing may be done poorly; or the wrong type of tensions may be employed.

In making taffeta of this type (or other fabrics not having a crepe twist) the filling must have an absolutely even tension. The least resistance to a perfect drag will cause trouble. A small amount of money spent regularly for new tension rings and tension posts for the shuttles will be wisely spent. Any post or ring that shows the least cut should be discarded and replaced with new material. Tension rings especially should be taken out at regular periods, even though no appreciable wear is noticed. Some mills try to save a few cents in repairs and lose dollars in damages. New tensions are a good investment.

If the fixer is negligent, he must be made to perform his duties properly. Another reason for uneven tension is too much fur in the shuttle. A good grade of fur should be used, preferably a fine grade of muskrat or squirrel. The fur should not be so long that it will touch the quill; but rather, it should be short, so the full quill will barely touch the fur. Most of the tension should be taken care of with the tension ring. If possible, the filling should be threaded straight out through the rings, and not back through the side or up through the porcelain beads. If porcelain beads are used, any showing the slightest cut should be replaced. If you are troubled with filling jumping out of the shuttle, place a pin across the shuttle about ½-in. from the front of the quill and run the filling threaded beneath the pin. Fur but one side of the shuttle if the filling will not cause any other defect beside the cockles, as this will lower the resistance.

Cockles may also be caused by long quills. If a 6-in. to 7-in. quill is used, the filling will often drag at the point and give trouble. Short quills are far superior to long quills on certain types of material, even though their use will lower production a few yards per day. Another type of quill which causes the same defect is a paper cop having grooves running around the quill. Wood quills of this type also cause the same defect. The quills should be smooth. If the filling has a great deal of oil, the trouble may be due to the oil. Oil causes the filling to drag along the quill, allowing it to come off in a series of small jerks. This is one reason why short quills are better. If oil is giving the trouble, advise the throwster at once.

◆

Warp Streaks in Finished Silks

Technical Editor:

Your inquirer No. 7221, in your issue of July 19, 1930, is quite right in considering the possibility of the warp streaks which he describes having been caused in the soaking process. Ingredients, method, and application of the soaking process may bear greatly upon the cohesion of the silk—and may be the cause of great damage.

A further possible cause of these streaks may be that the raw silk was originally of poor cohesive quality. Still another possibility may be a very widely fluctuating size of warp stock.

If you will publish this amplification to your own reply, we believe your inquirer will get at the root of his trouble and be more careful in the future.

Yours very truly,

(Miss) W. M. Kuhn,

President, Certified Silk Service, Inc.

New Machinery & Processes

Silk-Soaking Oils

TWO new products for use in silk soaking, Silklubric No. 30 and No. 100 Sulfol, have been announced recently by E. F. Houghton & Co., Philadelphia. Silklubric No. 30 is a water-soluble, self-emulsifying soaking oil which has been processed to remove the stearines and wax-like fats found in untreated oils, and to insure a product always uniform in acidity, titre, and degree of emulsifiability. One of the features of this oil is that by regulating the amount used and the temperature of the bath it can be used for soaking warps, organzines, crepe, hosiery tram, and other yarns. It is stated that Silklubric No. 30 is, as a rule, the only material needed to soak and condition silk for all purposes; when necessary, however, it can be combined with diethylene glycol or other agents which take up moisture.

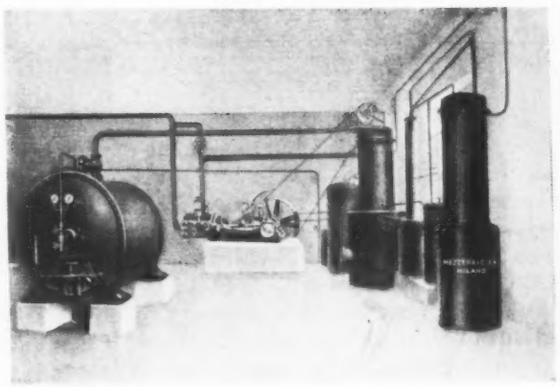
The other product, No. 100 Sulfol, has been developed for use with regular silk-soaking oils to assist in conditioning hard-gum silks or to condition silk for special purposes. One application of this product is in processing grenadine and crepe hosiery yarns. Addition of No. 100 Sulfol to the soaking bath is said to result in soft, pliable, and flexible yarns suitable for knitting.

Equipment Removes Pitch and Tar from Wool

ANNOUNCEMENT has been made recently that Mezzera & Co., Milan, Italy, is now prepared to supply to textile manufacturers outside of Europe complete plants, drawings, and specifications required for the erection and use of equipment developed for removing pitch and tar from wool. This plant, which employs trichlorethylene as the solvent, consists of a washing and depitching drum, a still and condenser for recovering the solvent, two closed tanks for holding the trichlorethylene, filter, and pumps.

The wool to be treated is packed into zinc baskets, which in turn are placed in horizontal revolving cages; and in this condition the wool is submitted to action of the solvent. The operations are mechanical, and the time of solvent action for each charge of wool is about 1 to 1¼ hours. It is stated that any sort of wool may be treated, and that the material retains its natural soft handle, there being no matting or felting. Since steam is used only for a short period at a moderate pressure, it has no injurious action on the wool. A machine for treating 1,200 to 2,200 lb. of wool requires two workmen, while one for processing 2 tons requires three workmen.

According to the manufacturers of this equipment the particles of pitch and tar contained in many wools, noils, and wastes are not removed during the normal scouring of wool, but on the contrary, are spread through the material, and during the finishing processes appear in the fabric as definite blemishes. For this reason, many manufacturers will not use such material. Consequently the greater portion of it is employed in the hat industry or is cleansed by detarring firms.

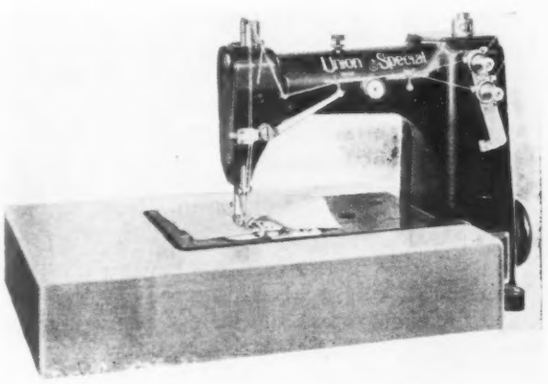


Equipment for removing pitch and tar from wool

Until recently the tar and pitch was removed by means of benzene or other inflammable detergents which are dangerous to use, or by means of high-boiling-point solvents in the state of emulsions, which due to loss of solvent are expensive. On the other hand, the Mezzera process is said to use a solvent which is neither inflammable nor dangerous to the workmen; and is also without injurious effects on the wool fiber. The loss of solvent amounts to about 6% on the weight of the wool treated, thus making the method comparatively inexpensive.

Flat-Bed Seaming Machine

HIGH speed in seaming operations is made possible with a new line of flat-bed seamers announced recently by Union Special Machine Co., 400 North Franklin St., Chicago. These Class 51,400 machines are designed to run smoothly and without vibration at a speed of 4,200 r.p.m. A feature of the seamers is the newly developed underslung feed mechanism, which is said to give a flat feed motion and thus insure work of excellent quality. Another improvement is a special oiling system designed to give adequate lubrication and at the same time to prevent damage to work through oil leakage. Threading and adjustments have been simplified, and the thread guides have been provided with porcelain eye-



Flat-bed seaming machine

lets. Frame bearings are bushed, all reciprocating driving members are constructed of drop-forged steel, and the main working parts are completely enclosed.

High-Efficiency Loom Motor with Artistic Lines

A NEW loom motor, developed by Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa., is said to incorporate in its design mechanical strength, high electrical efficiency, high power factor, and adequate overload capacity. In designing this motor the engineers obtained the assistance of a commercial artist, and particular care was taken to incorporate an artistic and pleasing appearance in the design of the motor. The result is a motor that blends in its outline with the loom that it drives.

This motor is built to carry sustained overloads for long periods of time without being damaged. The oiling arrangement is convenient and accessible. A snap lid on

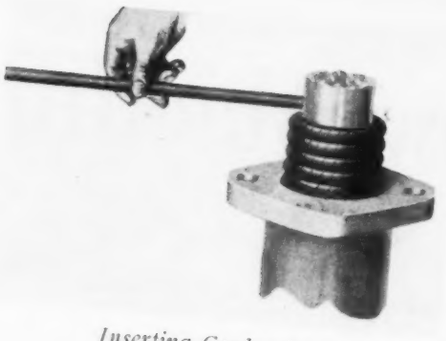
High-efficiency loom motor with artistic lines

oil cup prevents seepage. An oil overflow is provided to conduct excess oil outside the motor at a point which makes it instantly apparent that too much oil is being used. This also prevents the excess oil from reaching the insulation. Wool yarn provides lubrication through a window in the bearing lining. This leak-proof bearing gives efficient lubrication and protection. Other features of this motor are arc-welded stator and rotor; vibration-proof conduit fitting; moisture-proof insulation; and mounting easily adaptable for wall, floor, or ceiling operation.

Cordex Packing

CORDEX—a new packing composed of metallic particles, asbestos fibers, binder, and specially prepared lubricant encased in a thin shell of viscous material—has been placed on the market recently by Metalastic, Inc., Union City, N. J. This packing is said to possess all the merits of the loose form of semi-metallic packing and the additional advantage of easy insertion into the stuffing box. Cordex is supplied in straight rods 18 in. long. After the packing has been inserted into the stuffing box and the gland drawn up, the casing disrupts and a true non-abrasive seal and bearing result.

An important advantage possessed by Cordex is that it fits any stuffing box. If desired, small sizes may be



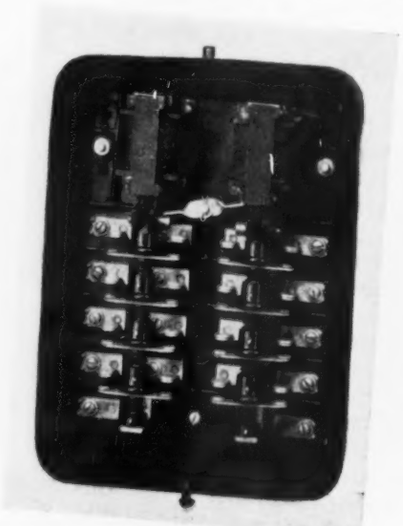
Inserting Cordex in a stuffing box

used for packing large boxes. Thus, although a $\frac{3}{4}$-in. size of old-type packing might be required to fit a given stuffing box, any smaller size of the new packing may be used, because it quickly adjusts itself to fit the box, regardless of shape or size. It is stated that Cordex does not harden in the box, is always elastic, and furnishes an excellent bearing surface for rods and shafts. It is easily cut with a knife, pair of snippers, scissors, or anything sharp that is handy. Careful measuring and fitting are unnecessary, since one needs only to fill the stuffing box with the desired amount of packing and draw down the gland. As wear occurs, which is relatively slight, another turn or so of Cordex is added and the gland tightened. It never need be removed from the box, and it is all used.

This packing is made for use in connection with steam, water, oil, gas, hot or cold air, ammonia, alcohol, brine, and acids. In order to prevent wearing, binding, or scoring of rods, it is made entirely of anti-friction materials that contain no abrasives. Two grades are made: one for low temperatures up to 500° F., and the other for high temperatures up to 1,200° F.

Reversing Switch for Small Motors

GENERAL ELECTRIC CO., Schenectady, N. Y., announces a magnetic reversing switch for small motors. This switch, designated as CR 7009-B 19, is designed to handle squirrel-cage motors rated $1\frac{1}{2}$ hp. at 110 volts, and 2 hp. at 220, 440, 550, and 600 volts.



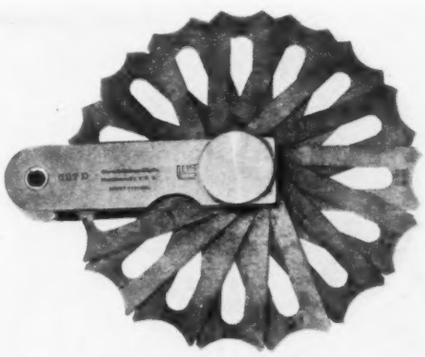
Reversing switch for small motors

25 to 60 cycles. The switch consists of two contactors mechanically interlocked and having four sets of contacts and terminals. Three of these contact sets are for power circuits, and the remaining one is for the holding circuit of the coil. The terminals are front-connected and are marked to facilitate wiring.

The equipment is mounted on a compound base for mounting in an enclosing case. The case is suitable for wall mounting and has removable cover and knockouts for the incoming and outgoing leads. A three-button ("Forward," "Reverse," and "Stop") push-button station is recommended for the control switch.

Fillet and Radius Gages

GAGES embodying a number of unique features and designed to simplify the rapid checking of fillets and radii have been announced recently by Brown & Sharpe Mfg. Co., Providence, R. I. The blades are double-ended, having concave and convex radii of the same size on the same blade, and thus reducing by half the number



Fillet and radius gage

of blades required for a given range. To permit ready use of the gages in places formerly difficult to reach, the blades are made about twice as long as usual. A slot in each blade makes it possible to extend and use a large number of blades at one time, while a large clamp nut locks the blades securely in any desired position.

Two styles of gages are made, one having a blade form which is adapted particularly for checking fillets and radii in corners and against shoulders, and the other having a blade form suitable for use in laying out forming tools and similar work. The first style is available in two sizes, giving a complete range from $\frac{1}{32}$ in. to $\frac{33}{64}$ in. by 64ths; and the second also is available in two sizes, giving a range from $\frac{1}{32}$ in. to $\frac{1}{2}$ in. by 64ths.

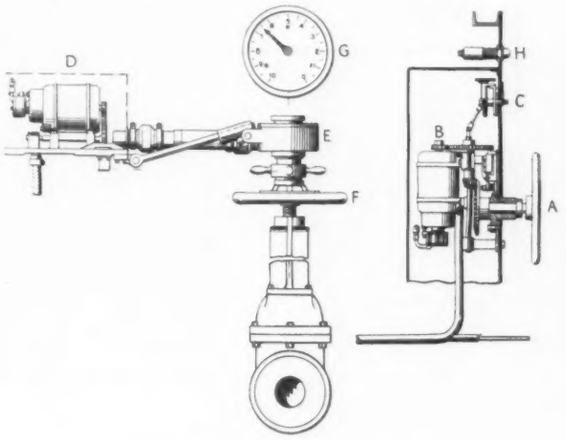
Additions to Photo-Electric Relay Line

IT IS announced that a number of new items have been added by General Electric Co., Schenectady, N. Y., to its line of photo-electric relays for the control of industrial machinery and other devices. In addition to the original a.-c. unit, designated CR-7505-A-2, which was described in a recent issue of TEXTILE WORLD, there are now introduced the following: a d.-c. relay, CR-7505-B-1; an outdoor weather-proof, a.-c. relay, CR-7505-C-2; an interior light-control unit, CR-7505-D-1; interior measuring devices, both a.-c. and d.-c., designated CR-7505-E-1 and F-1, respectively; an indoor light source, a.-c. or d.-c., CR-7500-A-1; and an outdoor, weatherproof light source, CR-7500-B-1, for alternating current. With these additions to the line, units are provided for a large variety of applications, both indoors and outdoors.

Remote-Control System

IT HAS been announced recently by the Brown Instrument Co., Philadelphia, that the DeFlorez System of remote manual control, developed originally for use in petroleum-refining processes, is now being manufactured for power-plant and general industrial application. With the DeFlorez system it is possible for an operator to open or close valves, operate rheostats, move levers, or turn screws at practically any distance. This makes it unnecessary for the operator to leave his post or to delegate an assistant to make any required changes or adjustments. While there are numerous applications of remote control both in power plants and processes, it is particularly desirable where controls are comparatively inaccessible and would ordinarily require mechanical facilities for access and additional labor to operate. It is likewise of special value wherever it is preferable to have one person control from a centralized station a number of operations at more or less distant points.

The DeFlorez system makes use of self-synchronizing, a.-c. motors which have the property of remaining accurately in phase. These Selsyn motors—which were developed by General Electric Co., for use in connection with fire control on battleships—when connected and energized, will transmit any power applied to one motor to the other with little distortion. Reference to the accompanying diagram will show the manner in which the remote-control system functions. When wheel *A* is turned, its motion moves the armature of the transmitting motor *B* and the indicator hand *C*; at the remote-control point the armature of the receiving motor *D* turns synchronously with the armature of the transmitting motor; the receiving-motor armature, operating through suitable linkage and gears *E* operates the valve or other mechanism to be controlled. An indicator *F* shows on dial *G* (placed on transmitting panel) the position of the distant-control setting; a pilot light *H* indicates whether the energizing current is on or off.



Schematic diagram of remote-control system

Durene

REG. U.S. PAT. OFF.

NATURAL, BLEACHED AND COLORED

YARNS

MAIN OFFICE

123 SOUTH BROAD STREET

PHILADELPHIA

Manning St.
HIGH POINT, N. C.

432 Fourth Ave.
NEW YORK

418 Franklin St.
READING, PA.

323 So. Franklin St.
CHICAGO, ILL.

James Building
CHATTANOOGA, TENN.

52 Chauncy St.
BOSTON, MASS.

HAMILTON, CANADA

LOS ANGELES

MILLS

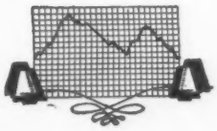
CHESTER, PA.

BELMONT, N. C.

ABERFOYLE MANUFACTURING COMPANY

Representatives in All the Principal Countries of the World

TEXTILE WORLD ANALYST



Raw Silk About to Begin Liquidation

Prices Will Remain Low, Though Situation Is Well Discounted, Forecasts Dr. Haney

Summary: **The raw silk market seems about to begin a prolonged process of liquidating huge visible supplies. During this process, prices will remain low; but the situation must now be well discounted, and Japanese control of supply pressure, together with the cheapness of silk as a consumption stimulant, should prevent further severe price declines. Somewhat lower prices, however, are probable in November and December.**

●

The analysis and forecast by Dr. Lewis H. Haney, Director, New York University, Business Research Bureau, which regularly appears on this page, considers various branches of the textile industry from week to week. The conclusions reached in the Analyst are mostly forecasts and generally apply to a time two or three months ahead. The Analyst is based on statistical data and does not reflect temporary trade sentiment.

IT SEEMS fair to say that the process of liquidating the excessive stocks of raw silk is now under way. It is likely to be a slow one, and the more so because it is improbable that there will be any wholesale dumping of stocks on the market.

One must be impressed with the depressed condition of the Japanese silk industry and the injury that has been done to silk farmers. It is safe to assume that the tendency to over-produce Japanese silk has been checked, and that forces have been set in motion which will ultimately hold production and supply down to the level of demand at fair prices.

It should also be noted that the loans under the Indemnity Plan, which cover 84,000 bales, have been extended, and that 28,000 bales more are held by the syndicate. This condition should assure that supply pressure will be minimized.

On the other hand, lower prices for hosiery, velvets, and silks in this country are likely to stimulate buying. A gradual reduction in supply pressure and a gradual increase in the quantity of silk consumed at a low level of prices for silk textiles should work the situation out under fairly stable prices. There is, however, no likelihood of an upward trend in silk prices. A continued low level, with only occasional recessions under seasonal influences, seems to be the prospect.

BULL POINTS

1. Summer and Autumn cocoon crops in Japan are probably reduced a little.
2. Reeling has been much curtailed, and the into-sight movement has declined, being about 17,000 bales under last season.
3. Japanese stocks have practically ceased to increase.
4. Japan extends the guarantee of loans under the Indemnity Law and shares losses with the reelers, thus reducing market pressure.
5. The ratio of world production to world consumption of raw silk was a little less unfavorable in August, according to the National Raw Silk Exchange figures.
6. Cutters seem to be buying more freely for the fall season.
7. Some manufacturers are turning from rayon to silk.
8. Hope is growing of wider consumption of silk at present low prices.
9. Consumption is improving in European countries.

BEAR POINTS

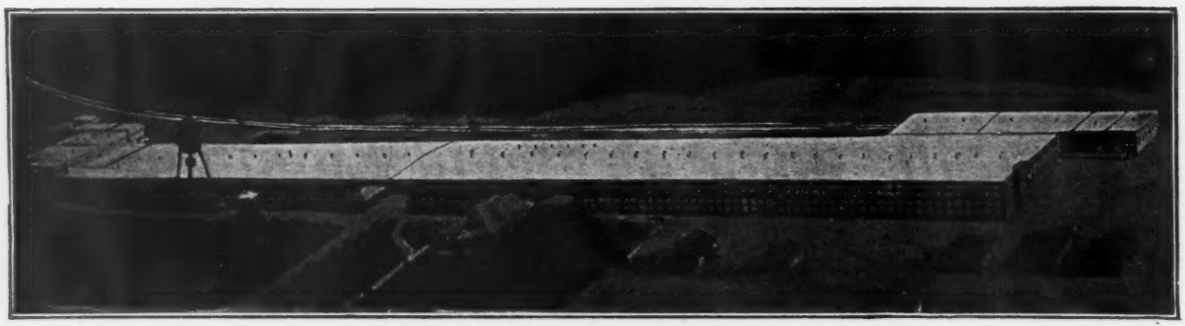
1. Japanese exports continue relatively small, and are now 13,000 bales below last season.
2. Japanese stocks continue very large, both of cocoons and raw silk, the latter being 145,000 bales.
3. The total visible supply increased in August to over 231,000 bales, which compares with 122,000 bales a year ago.
4. The Silk Association figures were rather bearish, showing increased stocks at New York and reduced mill takings.
5. Sharp curtailment in silk machinery activity and employment was shown by July figures.
6. Production of silk hosiery is reduced, and stocks are burdensome.
7. Response to price concessions is disappointing down to the present time.
8. Manufacturers continue to buy little, and hold out for lower prices.

The evidence suggests an early beginning of a gradual improvement in the statistical position, but shows the situation to remain so unfavorable that the silk market is likely to remain weak and irregular during the balance of the year.

STATISTICAL POSITION

At first glance, the Silk Association figures for August seem entirely bearish. There was a good sized increase in stocks at New York, and imports were relatively small, indicating low deliveries to the mills. The quantity in transit was large, suggesting heavier imports and further increases in domestic stocks.

A more careful examination, however, throws a somewhat more favorable light on the figures. It must be remembered that the movements shown were largely seasonal. Stocks nearly always rise in August, and the increase last month can not be called unusually large. Imports also increase at this season, and the gain in August was much smaller than usual. Deliveries, though small, increased somewhat, under seasonal influences. The showing made by the deliveries is



Spinning Mill, Lincolnton, N. C.

A BETTER STOCKING AT LESS COST

To meet the low prices that the hosiery manufacturers are getting for their hosiery today they are compelled to reduce their costs. Costs can be reduced by having less press-offs, less uneven plating and by increasing the speed of their machines. To meet these demands for better running yarn we are now making a **FINE MULE SPUN SEA ISLAND YARN**, which, owing to its greater elasticity and strength reduces press-offs to a minimum, giving a much more even plating, especially on high-speed machines. The very high lustre of this yarn will also increase the general appearance of the stocking.

Owing to the success our customers have had with this **FINE COMBED SEA ISLAND YARN** for picot edging, many of them are already using it with equal success for plating and reinforcing.

We can supply you with this yarn, which is not only fine as to quality, but in count also, in all numbers from 50/2 to 160/2 mercerized and from 160/2 to 200/2 in lisle.

This yarn can also be used for making fine lisle stockings.

Write today for samples.

BOGER & CRAWFORD

"From the Cotton Field Direct to You"

J and E. Venango Sts.
PHILADELPHIA, PA.

disappointing, the increase being much less than anticipated; but it is something that they increased at all. One can at least say that Japan has shown moderation in selling, neither dumping nor withholding, and that the visible stocks at New York are now ample but not excessive.

There is nothing to get enthusiastic about, however, the chief favorable argument being some indication that the time is nearer when the enormous visible supplies will begin to be liquidated. It remains true that imports in August were nearly 23% in excess of the estimated deliveries for the month, which is only a little less than the unusually high ratios in August, 1927, and August, 1928. New York stocks are also the highest in comparison with current deliveries since 1927, and with that exception have not been equaled in recent years. Stocks are only 7% under a year ago, while deliveries are 30% less. The quantity in transit is practically as large as a year ago in spite of low mill consumption.

Certainly no relief from the steady pressure on the supply side is indicated by the world visible supply figure. At 231,678 bales, the total is of record proportions and represents an increase of 17,000 bales over the end of July. Combined New York and Yokohama stocks, at over 151,000 bales at the end of August, have averaged during the past three months 266% of the 1922-26 level. This comparison makes due allowance for seasonal variation. On the other hand, United States machinery activity —and therefore mill consumption—has been running about 85% of the average level in 1922-26. Thus there continues to be an enormous disproportion between supplies and mill requirements.

Really the most that can be said is that (1) the rate of increase in the seasonally adjusted figures of silk stocks has now become small, and that (2) there are indications that the trend will be downward by October if not sooner. Thus the beginning of tangible progress in liquidating excess supplies is probably not distant, and, once under way, each month will bring nearer the ultimate restoration of equilibrium. It seems logical to expect reactionary periods during the liquidating process. Liquidation can hardly go far enough to bring underlying strength before next spring, if then. The silk market is likely to be weaker in November and December—possibly before the end of October.

The average price of Cracks XX in August was $3.05 which compares with $2.99 in July and $5.12 a year ago. The market was remarkably steady throughout August, the range being between $2.90 and $3.05 for Cracks XX. Thus the declining trend of the silk market appears to have been definitely checked.

Naturally, reactions are to be expected from time to time during the process of liquidation, but a large measure of stabilization appears to have been effected. It seems probable that the unfavorable factors which still apply have been pretty well discounted, and that the most necessary liquidation has been accomplished. If this is so, recessions will not go very far, and the market will come back to present levels.

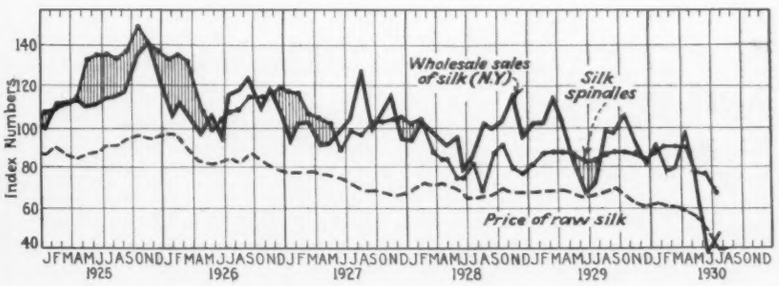

Index Numbers
140
120
100
80
60
40
Wholesale sales of silk (N.Y.)
Silk spindles
Price of raw silk
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1925
1926
1927
1928
1929
1930

Fig. 1. SILK TRADE BAROMETER—Price of Raw Silk—Average of high and low Thursday prices of Crack Double Ex. (Journal of Commerce). Spindles—Per cent of available machine hours operated (Silk Association of America). Wholesale sales of silk (N. Y.) adjusted for seasonal variation (N. Y. Federal Reserve Bank). Average 1922-1925 = 100 for all indexes.

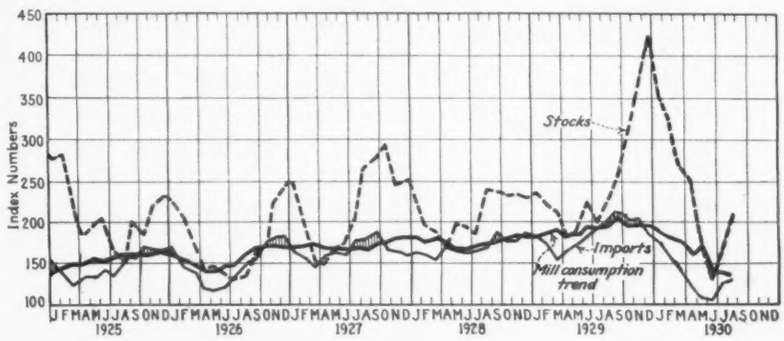

Index Numbers
450
400
350
300
250
200
150
100
Stocks
Imports
Mill consumption trend
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1925
1926
1927
1928
1929
1930

Fig. 2. STATISTICAL POSITION OF RAW SILK—Stocks of Raw Silk, Bales in storage at end of month. Average 1921 = 100 (Silk Association of America). Imports, Pounds. Average 1921 = 100. Three months' moving average (Dept. of Commerce). Last month estimated by converting each item of Silk Association figures from bales to pounds and then applying the per cent increase to preceding month. Factory Consumption Trend, Deliveries—Bales, average 1921 = 100. Five months' moving average (Silk Association of America).

No suggestion of higher silk prices is to be found in a study of the trend of machinery activity and the wholesale sales of silk textiles. The trend of spindle activity was sharply downward in July and the lowest since the middle of 1928. Wholesale sales recovered a little, but were the lowest since 1921 at least, and were low in comparison with the indicated production. The sales figures were naturally affected by low prices, but it also is true that the July sales in yardage were 15% under a year ago.

The fact that stocks of wholesalers in yards increased 8.3% in July and were 2.2% above a year ago, tends to confirm the conclusion that sales were below production.

It is unlikely that the silk market can show much strength until silk spindle activity picks up, and that is hardly possible until sales of silk goods and hosiery recover from the effects of accumulated stocks and the reduced purchasing power of consumers.

The Textile Trend

COTTON TEXTILE MARKETS: While the Government crop estimate of 14,340,000 bales caused a drop in cotton futures, there was no appreciable effect on goods prices, either gray or finished. Trading slackened considerably, but there was no pronounced bear pressure from buying sources. Fabric prices were firm and unchanged, the majority of mills predicting that there would be no change in quotations unless there was some radical change in conditions, which does not seem likely. Denims will be continued at 12½c., it is said.

WOOL TEXTILE MARKETS

With cutters still occupied with deliveries of fall merchandise, it is probable that fancy suitings will not be opened until well after Sept. 15. Present men's wear buying is limited to spot orders of moderate size. Sellers look forward hopefully to the possibility of a squeeze in stock goods, stating that quantity of fabrics on

Amafleece
Amaray

A galaxy of color

125 colors—solid or in various combinations—are offered in these yarns. Knitters are using them with telling effect in creating unusual hosiery, bathing suits, sweaters, jersey cloth, underwear, etc.

They are soft and fleecy—ideal for the various products outlined above. Produced with typical Cannon thoroughness at our Amazon Mills. Available in 8s to 30s—single and plies—cones, tubes and skeins. At this mill we also spin Amamerino and Rayomerino — companion products containing 5 to 10% wool.

Have you seen these yarns?

Write for samples today.

CANNON MILLS
INC.

PHILADELPHIA

New York Providence Boston
Reading, Pa. Chicago Utica, N. Y.
Chattanooga Kannapolis, N. C.
Hamilton, Ont., Canada

Sales Agents for
EWING-THOMAS CORP.
Mercerized Yarns and Thrown Silk

Sole Sales Agents for
AMERICAN ENKA RAYON
IMPORTED DUTCH ENKA RAYON
for the Southern States

CANNON YARNS

hand is less than generally realized by buyers. Dress goods lines continued in good call with printed challis, crepes and worsted-rayon goods stressed. Here, too, spot goods are considered inadequate to meet the wants of cutters. Activity in outerwear worsted yarns continues and is inclined to expand further; prices are steady but not advancing.

Knit Goods Markets

Knit goods markets show considerable improvement. Demand for outerwear, especially fancy sweaters is spirited and buyers have difficulty in getting exactly what they want. Crickets, baby shakers and women's ribbed coats are active; some mills ask four weeks on shipment. Staple sweaters also moving. Bathing-suit demand moderate. Hosiery prices are steady since latest reduction and market hopes for stability. Considerable future business is being placed on full-fashioned goods, but never for more than four weeks ahead. Christmas buying is decidedly backward. Winter weight underwear is enjoying a good call, but sales are estimated to be only 50% of normal for this period; lightweights slowly opening.

Silk Textile Markets

Raw silk trading has been light and sluggish, with prices weak; quotations on Exchange are 3 to 8c. below last week. Buyers showed little interest and on two days only single orders, each for 10 bales, changed hands. Thrown silk has improved somewhat, thanks to increased interest in grenadine twist yarns for hosiery; broadsilk mills are buying steadily, but in small quantities. Anxiety of some mills to clear surplus has brought a temporary weakening of spun yarn prices; demand has improved, however, and outlook is good. Mills look for an early firming. Broadsilks are in fair call; prices, barring a break in cantons, are steady. Buying is still spotty, but garment manufacturers are increasing output and demand is expected to pick up soon. Flat chiffons, especially georgettes sell moderately; satin is favored in shades of green, brown, wine and black.

More Movement in Textiles

Listed Shares Show Gains While Unlisted Still Decline

THERE have been sharper changes in prices of listed textile mill shares during the last week than for some time. It seems that the summer lassitude is passing. Many of the stocks scored distinct advances. In a general way the unlisted securities are still sagging and further declines are reported from the South as well as from New England centers.

Among the listed stocks Duplan gained 3 points to 18 at mid-week, Industrial Rayon at 86¼ showed a gain of 5, Pepperell at 90 a gain of 4, and Real Silk Hosiery at 49⅞ a gain of 6⅛.

The Boston stock auctions did not handle a sufficient volume to establish a trend. At Wednesdays sales 250 shares of Arlington sold at 24, a gain of ¾ of a point. Plymouth Cordage on a small sale of 73⅛ dropped 9⅞ from previous levels.

Rumors of further amalgamations and mergers are current in several centers. A holding company which would draw together the interests of Homer Loring and those of the Berkshire Fine Spinning Associates together with certain unattached New Bedford mills is in the discussion stage in New England. From Paterson come further stories of alliance between finishing companies operating on silks and rayons.

Corticelli's Report

A strengthened financial position, with inventories 44% lower than in the preceding year is reported by the Corticelli Silk Co., manufacturers of fabrics, threads and women's hosiery, for the fiscal year ended June 30, 1930. In its report to stockholders, an operating loss of $456,000 is shown. For the fiscal year ended June 30, 1929, the company reported a net loss of $196,497 after depreciation, interest, etc.

The balance sheet, as at June 30, 1930, shows a reduction in the company's indebtedness of $1,650,000. Loans payable, which at the close of the previous fiscal year totaled $2,550,000, on June 30, 1930, totaled $900,000.

In the mill statements listed in the table below is shown the Victor-Monaghan Co. which for the year ended June 30, 1930, cut into its surplus by $475,824. The other mills listed give figures for earlier periods, some being the calendar year of 1929 and others running to March 31, 1930.

Apponaug Shows Profit

Apponaug (R. I.) Co., finishers of textile fabrics, reports for the fiscal year ended June 30, 1930, net income, after all charges and deductions, of $854,590, equal after preferred dividends to $8.88 a share on the 90,000 shares of common outstanding at the end of the period. This compares with net income of $701,076, or $7.02 a share on a like number of common shares outstanding at the end of the

MILL STATEMENTS

Name and Address of Company	Line of Business	Fiscal Year	Assets						Total	Liabilities and Capital		
			Cash and Debts Receivable	Raw Materials, Mdse., Etc.	Total Quick Assets	Real Estate, Buildings and Machinery	Miscellaneous Amount	Miscellaneous Description		Accounts Payable, Floating and Funded Debt	Capital Stock	Surplus Profit and Loss, Etc.
Victor-Monaghan Co. Greenville, S. C.	Cotton	June 30, 1930	$467,233	$1,916,025	$2,383,258	$5,518,659	$79,172	Prepaid	$7,981,089	$1,564,383	$5,687,200	$729,506
		June 30, 1929	816,380	1,046,006	1,862,386	5,459,502	60,609	Insurance	7,382,497	478,767	5,698,400	1,205,330
Shaw Stocking Co. Lowell, Mass.	Knit	Dec. 29, 1929	67,667	97,753	165,420	304,002	16,469	Miscellaneous	485,891	14,206	450,000	21,685
		Dec. 29, 1928	75,352	110,995	186,347	720,277	13,804	Miscellaneous	920,428	14,353	450,000	456,075
Shawmut Woolen Mills, Stoughton, Mass.	Wool	Dec. 31, 1929	149,976	231,577	381,553	103,146	2,922	Prepaid	487,621	92,617	250,000	145,004
		Dec. 31, 1928	160,109	220,420	380,529	87,012	1,216	Prepaid	468,757	94,385	250,000	124,371
Gluck Mills Anderson, S. C.	Cotton	Mar. 30, 1930	119,230	200,632	319,862	1,162,399	7,893	Supplies	1,490,154	248,282	450,000	791,872
		Mar. 30, 1929	82,863	210,028	292,891	1,108,055	11,962	& Fuel	1,412,908	199,294	450,000	763,614
Roxbury Carpet Co. Saxonville, Mass.	Wool	Dec. 31, 1929	345,462	1,391,676	1,737,138	1,638,923	*288,387	Miscellaneous	3,664,448	529,385	1,997,400	1,137,663
		Dec. 31, 1928	391,680	1,588,597	1,980,277	1,714,716	†379,962	Miscellaneous	4,074,955	839,491	1,997,400	1,238,064
Royal Worsted Mill Lowell, Mass.	Wool	Mar. 31, 1930	52,551	185,132	237,683	254,961	184	Prepaid	492,828	171,816	321,012	.....
		Mar. 31, 1929	130,774	288,330	419,104	269,552	599	Prepaid	689,255	362,962	326,293	.....
Massasoit Spinning Co., Webster, Mass.	Wool	Dec. 31, 1929	30,910	116,227	147,137	232,376	588	Insurance	380,101	88,748	96,000	195,353
		Dec. 31, 1928	69,069	121,219	190,288	218,305	596	Insurance	409,189	116,855	96,000	196,334

*Includes deficit of $251,990. †Includes deficit of $343,418.

LION BRAND

RAYON GLANZSTOFF YARNS

Successful Weavers Use Reliable
GRADED RAYONS

GLANZSTOFF GRADED RAYONS

Eliminate:

Sizing and Dyeing Uncertainties
Seconds and Claims

▼

GLANZSTOFF GRADED RAYONS MAKE BETTER FABRICS

Because:

They Run Better
Speed Up Production
Insure Regularity
Reduce Imperfections
and are Always Uniform

American Glanzstoff Corporation

180 Madison Avenue, New York, N. Y.

American Plant: Elizabethton, Tenn.

preceding fiscal year. During the year 1930 the company reduced the outstanding 6½% preferred stock from 10,000 to 8,195 shares and in addition set aside a reserve fund for future plant expansion and contingencies totaling $500,000. At the close of the last fiscal year the company reported current assets of $1,833,735 and current liabilities of $268,540, leaving working capital of $1,565,195.

Wabasso Cotton Co. Deficit

For the fiscal year ended June 30, 1930, the Wabasso Cotton Co. Ltd., Montreal, Quebec, showed a net deficit, after depreciation, bond interest and sinking fund payment, of $52,361, compared with a loss for the 1928-29 period of $109,677 and a profit of $216,800 for the 1927-28 year. Current assets as of June 30, 1930, totaled $2,700,822 and current liabilities $1,737,456, leaving net working capital of $963,366, compared with $1,141,476 on June 30, 1929.

Boston Stock Auctions

The following sales of textile shares were made at Wednesday's auctions:

Shrs.	Mill	Par	Price	Change
55	Associated Textile	...	35-36¾	....
40	Pepperell	100	89½-90	+3¼
5	Naumkeag	100	88	....
250	Arlington	100	24	+ ¼
45	Pierce Mfg. Corp.	100	105	....
50	Connecticut Mills, 1st pfd.	100	5¼	—4¾
8	Plymouth Cordage	100	73¼	—9¾
453	Total			

Another Decline in South

Charlotte, N. C.—The weekly market letter furnished by R. S. Dickson & Co. shows a decline of 1.04 in average bid price of 25 common stocks of southern textile mills. The closing bid price for the week stood at 66.72 per share as compared with 67.76 previous week.

Burlap Prices Decline Once More

Burlaps for future shipment from Calcutta were on a lower basis at midweek. Spot and afloats were affected as well, dropping 5-10 points. From all reports, business was practically at a standstill, with dealers not wishing to take a stand in a falling market.

The 8 oz. 40s for spot, two weeks, and September shipment were 4.30c.; October-December, 4.35c.; January-March, 4.40c. The 10½ oz. 40s for spot were 5.70c.; two weeks, and September shipment, 5.75c.; October-December, 5.80c.; January-March, 5.85c.

DuPont Closes One Buffalo Unit For Repairs

Buffalo, N. Y.—As part of the curtailment policy of DuPont Rayon Co., one unit of the Buffalo plant will shut down on Monday. This unit was the first started here and has been in operation for more than 10 years; during the idle period important changes in equipment will be made and new machinery will be installed.

Cotton Yarns Recuperating

Crop Report, However, Causes Slight Relapse in Convalescence

Philadelphia.

THE patient that had begun to walk on his own legs and had begun to recuperate generally, has had a slight relapse but it is nothing serious and according to all doctors favorable progress will again be apparent within a few days, if not by the time this appears in type. In fact several well-known specialists predict that in the end the setback will accelerate recovery of the sick one.

The sales yarn market has been sick for a good many months and three weeks ago when improvement of notable proportions occurred in the carded weaving section the first change for the better was watched with hopeful anticipation by all having the situation under study. This spurt had been carefully watched by spinners and dealers and nursed during the intervening period with such patience that dealers reported most active trading for six months in several instances in weaving numbers.

That Crop Report

When the crop report was published Monday things changed both in cotton and yarns, the former dropping about $2.50 a bale. Yarn changed little in price but, what was probably more important, demand contracted again as buyer interest froze up hard. After the blizzard blows over it is probable that demand will not only come back to its former temperature but more mills will buy at the lower level, assuming that the drop is not quickly wiped out later this week.

Cotton is at or near the low point of the present downward move and a setback such as seen Monday places the market in a better position for those ready to act with confidence and in line with their own better judgment. The trade is thinking along these lines, and for that reason buying will surely resume within a few days. In addition to activity in weaving yarns there have been signs that better business will be seen in knitting numbers and also in combed and processed qualities which up until present have remained as dull as before the weaving improvement began.

Spinners' Prices Unchanged

Although spinners of weaving yarns now have a fair amount of business in hand for delivery during next month, there is no disposition for them to raise prices nor to lower them when cotton went off Monday. Yarn prices Tuesday showed no effect of the change in the raw material, meaning that these sellers had enough low-priced business to last them for this time and that they were willing to wait until October to see if they would have to accept more on the same basis.

September Will Be Good

Notwithstanding this temporary let-up in sales for near-by delivery September to date represents a distinct improvement in both sales and shipments on contracts for majority of sellers here. Indications are that it will be one of the most active months this year. The most unfavorable factor from spinners' angle is that their margins are simply not there in most counts. The fact that yarns held steady this week is one fairly convincing sign that spinners are at the end of their string and will not allow margins further to contract.

Spinners continue to report that their higher priced contracts placed several months ago are in better shape than at any time this year. While these are not yet in really good shape, a number of manufacturers have taken sufficient delivery to make them show interest in new commitments to lower their average. Spinners state several in this category have bought knitting yarns this week, placing blanket contracts on basis of 28½c. for average quality 30s cones or in combed knitting orders have been placed on basis of 41½c. for 38s. Weaving yarns sold at 22½c. for 20s-2 warps and 27½c. for 30s-2.

●

New York — Optimism is more strongly expressed in the carded yarn field than it has been for weeks. There is a lot of room for improvement, sellers admit; but they feel that the worst is past and that a gradual pick-up is in prospect.

Prices dipped following the crop report, but with a firmer raw cotton market have gone back to levels prevailing the previous week. The greatly diminished profit margin has put the majority of spinners in the frame of mind where they will shut down rather than meet bids. There are the customary number who are anxious for business at any price, but their number is considerably less than it was a month ago. Buyers have not raised their price ideas any appreciable extent, although in cases the need for yarns has made them less apt to bargain to the limit.

The average order has run around 10,000 lb. with prompt shipment wanted in all instances. Yarns are far from scarce; however, sellers tell of difficulty in locating certain descriptions for quick shipment. Insulators are more in evidence and bids aggre-

SANS seam . . . guiltless of mark . . . so this new stocking is free even from the suspicion of wrinkles.

The citadels of fashion have capitulated to the trim-fitting sheerness of the seamless stocking . . . as witness the recommendation by Paris couturiers of this type for giving a 'finished' effect to the costume.

No seam to twist or mar the leg's sheer shapeliness.

The "Gussetoe" . . . the smooth, fitted foot . . . with no seam or ridge.

And comfortable, of course . . . for there is no seam in the foot or Gussetoe.

This smart stocking without a seam is the product of the new Model K machine.

Established 1865

SCOTT & WILLIAMS

Incorporated

366 Broadway
New York, N.Y.

gating 75,000-100,000 lb. have been sent out. It is seldom though, that individual counts are wanted in lots greater than 15,000 lb.

Towel warps, ordinary quality 20s-2, are selling for 22½-23c., but it is hard to locate southern spinners willing to sell for less than 23c.

Larger Worsted Yarn Sales

Most Active Trading of Year In Outerwear Counts

PHILADELPHIA.

HERE is one spot in textile field where you can point and say conditions are much better. Quite different from saying things look as though they might improve within the next month. Trading in outerwear counts is more active and generally better from spinners' standpoint than they have been at any time this year. Not only better from volume standpoint but spinners' margins are fair in the counts that are selling.

Manufacturers of knitted two-piece suits are asking for larger quantities of zephyr yarns than French system spinners are able to turn out, the spot situation being notably strong in such yarns. Yet there is nothing in view at present that leads one to expect higher prices in them but rather a firmer attitude on part of sellers than was apparent a month ago.

Outerwear spinners in many instances have raised their operating schedules and are running more spindles than last month, several reporting a more active demand for their merchandise than any time this year. Character of inquiry and sales at this time leads one to expect that instead of the peak being reached, trading in them will expand further and continue for several weeks ahead at least.

LIGHT-WEIGHT OPENING SOON

Little can be expected from men's wear yarns just yet, the light-weight season not being under way so far as yarn contracting is concerned. Local fancy men's wear mills will show their new lines this week and next although most will not advertise such showings, simply quoting customers without announcements. These mills are busy in several instances, finishing heavy-weight orders, but attention is now on next season and indications are fairly definite that the next worsted season will be a good one from manufacturers' and spinners' standpoint, spinners of mixes looking for a large volume to be placed within the next few weeks.

Popularity of worsteds is for the first time in many months carrying over into the dress goods section, and such manufacturers are enjoying a fair run, buying quantities of 2-50s to be used with single filling or fancy yarns. Spinners have booked a larger dress goods business than at any time this year.

Manufacturers account for expansion in demand for worsteds, presumably at the expense of woolens, by the relative lowness in wool values and yarn costs. Since it is possible, for example, to obtain men's worsted suits made from good quality yarns at low prices, more users have turned to worsteds, not only in men's wear but in dress goods.

QUOTATIONS ARE STABLE

Competition is keen among spinners for this increased business and while stocks are not large and in fact small in most popular knitting counts, there is little expectation that prices will advance materially unless the raw material market makes this imperative, one outerwear spinner asserting that he had little complaint at present concerning his spread between wool and yarn prices. Such spinners are much more favorably situated, for example, than cotton sales yarn spinners in this respect.

Outerwear yarns have been moving on basis of $1.05 for good 2-20s, 50s, English spun in the oil. There are lower quotations but most representative spinners are firm at this mark. Single English spun counts are steady at $1.20 for 1-15s, 50s, dyed, several holding for 2½c. higher. Other knitting yarns are unchanged in price but slightly steadier, 2-40s, 64s, zephyr qualities being the firmest of the list because of large demand.

The market as a whole presents the most attractive appearance from sellers' viewpoint that has been witnessed this year and while weaving numbers are lagging, this condition will probably change within the next few weeks.

Thrown Silk Stronger

Better Demand Reported; Good Call for Grenadines

THROWN silk has shared the strengthening which other textile groups reported following Labor Day. The pick-up is gradual, but each day brings a steadier tone and the current week has been perceptibly firmer. Thrown yarn prices are 3 to 5c. above last week.

Broadsilk mills are buying steadily, but in small quantities and for spot shipment. Hosiery knitters show a tendency to future coverage, especially in buying grenadine twist yarns which numbers are selling actively. Some throwsters say their customer-mills have increased hosiery output until they are running 75% of normal. The thrown yarn mills specializing in grenadines find these yarns are becoming steadily more important at the hosiery end, and they tell of steady business being booked. One uptown throwster said his surplus of grenadine yarn was shrinking rapidly, due to pressure for spot shipment, and he looked for a difficulty at that end, if the call continues at present pace.

Others also reported important increase in the demand for grenadine yarns, indicating a stronger consumer acceptance of the new hosiery.

CREDIT TONE BETTER

Confidence regarding broadsilk credit is improving. Throwsters lean to the belief that the firms which would go under, have gone and that those strong enough to weather the last three months of depression will be able to carry on. However, credit is still being watched, at both broadsilk and hosiery ends. In some cases throwsters are selling yarns on credit to hosiery knitters on the basis of actual hosiery orders on books which the knitters open for inspection of the throwsters.

◆Underselling Hurts Spun Silk Market

ANXIETY on the part of some spun silk mills to realize quickly on accumulated stocks has brought a slight weakness of prices of spun yarn, despite a considerable improvement in demand. The larger mills, particularly those which curtailed output and therefore have no great quantity of yarn on hand, are holding to list figures, but they are encountering some resistance among buyers. Spinners do not regard the current underselling as more than a temporary turn. The increased interest among manufacturers and especially their growing tendency toward spring contracts is making for a better undertone.

There is a steady though light demand for spot shipments, and some fair-sized orders for November-December delivery. The price weakness is mostly at the futures end. The bargains offered by a few mills have made manu-

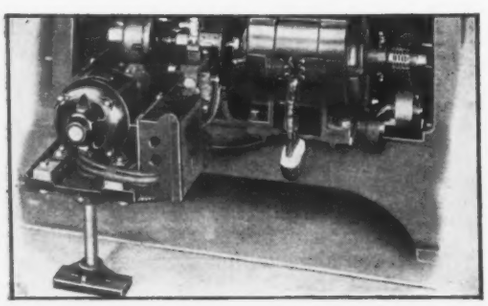
Would *you* buy a car without a starter?

Would you get rid of yours if it didn't have one?

The Slow Motion Mechanism of the new Wildman Full-Fashioned machine is a similar improvement.

A touch of a lever does the trick.

WILDMAN MFG. CO., ***Full-Fashioned Division***
Norristown, Pa.



The new Wildman Slow-Motion mechanism

WILDMAN
FULL FASHIONED HOSIERY MACHINE

facturers reluctant to place spring contrasts at list. It seems likely that this weakness will wear itself out, once the mills that are underselling get rid of part of their surplus. Spinners assert that the market tone does not justify weakness; they contend that there is plenty of business to be had at list prices, if mills would stand firm.

SPRING BUYING LIGHT

Spring volume to date is light. Manufacturers are not fixed on their plans; confidence is stronger, but it is confined to nearby months. Indications are October will see further improvement, as by that time the manufacturers are expected to be ready to contract definitely on spring requirements.

The two weeks since Labor Day have brought a steadily increasing interest among consuming groups. Current buying is about equally divided between singles and doubles; 62/1 is in good call among the finer counts.

Rayon Undertone Stronger

Buying Still Confined to Spot, But Outlook is Better

RAYON yarn demand is slightly stronger and there is a better tone in the market, but manufacturers continue to limit their contracts to immediate needs. Practically no future business is being placed; it takes strenuous salesmanship to persuade mills to buy even a few week in advance. The fall improvement is lower than was expected, and rayon producers are still holding down on production. The industry is running about 75% of normal at present, and producers indicate they will not change this status until manufacturers show a definite predilection to buy. Uncertainty as regards prices is slowly giving way to an assumption that current rates will stand.

Producers are less pressed to offer price guarantees and leading companies report that discussion of this question among their customers has ceased entirely; the recent pronouncement by two principal firms that they would not give guarantees apparently has dealt this issue a death-blow. However, even if the current strengthening continues it will be some time before rayon-consuming industries are won back to complete confidence. Present sentiment is promising; buying is steady though light, and it is evenly scattered among the outlets. Demand from underwear mills for 150s has increased slightly. Broadsilk mills are less sure of their own sales prospects, and are hesitant about buying, even spot.

CHRISTMAS SALES SLOW

Delay by distributors in placing business for Christmas has made manufacturers reluctant to produce more than sufficient for quick turnover. This in turn has slowed up yarn sales until they are well below normal for the season.

Rayon producers are disposed to deprecate the talk that the industry might go into the underwear-producing business in order to solve the problem of inferior rayon garments. Several factors thought that it very unlikely that rayon companies would enter the finished goods line. Rayon production itself is a big field, they pointed out, and the drastic changes necessary for such an expansion would be impractical. Also, it is felt that the "quality control" plan now being tried by the Viscose Co., could conceivably solve the problem of inferior rayon underwear if the plan were generally adopted by rayon producers.

◆Rayon Waste Active; Prices Stronger

A SUDDEN demand by woolen manufacturers and automobile upholstery fabric manufacturers for large supplies of cheap rayon waste, which manifested itself toward the end of last week, has brought a sharp improvement in the rayon waste market. Prices slant upward, and dealers are holding firmly to their figures. Manufacturers appear to have decided on their output schedules for fall and are buying steadily. There are no big orders and little future business, but the tightening of the market is expected to stimulate advance coverage as a means of protection.

Manufacturers showed interest immediately after Labor Day and in a week nearly 500,000 lb. of cheap waste was estimated to have changed hands. At the high grade end, demand was lighter, though here too a firming was evident. There is a steady but light call for the better grades, and buyers are less disposed to bargain for concessions. The clearance of cheap waste strengthened the position of the better yarns and dealers now look for steady improvement. High grade yarn stocks available are very limited, due to the light imports and the curtailment of domestic rayon output. Indications are dealers will have to increase imports shortly if the present demand is maintained.

◆Inactive Cotton Waste Market

BOSTON.

THERE is no great activity in the cotton waste market. Dealers are receiving more inquiries, but demand is still of a hand-to-mouth character. Consumers of wastes are watching developments in the raw cotton situation, and may be expected to defer forward purchasing until the raw material shows some signs of stability. Some of the large waste houses are said to have good-size supplies of spinnable materials on their hands which they are reluctant to dispose of at current levels.

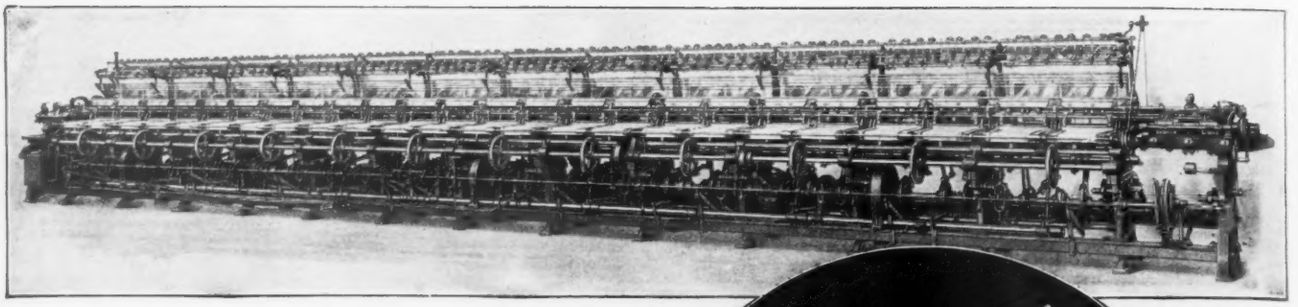
Prices on all classes of wastes are nominal owing to the small amount of business being transacted. Comber is quoted on a basis of 80 to 82½%, with some dealers asking 85%. Strips are quotably unchanged from a week ago. Threads continue a strong feature of the market, single spooler bringing 8 to 8½c. Bedding stocks are dull and easy in price.

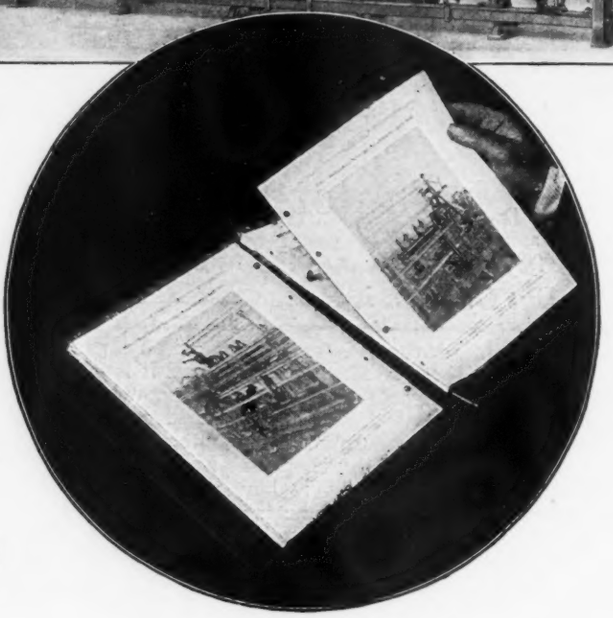
Cotton Market Steadies

First Reaction to Government Crop Report Was Sharp Break

GOVERNMENT crop report proved above expectations based upon the average of the private reports which preceded it. The latter had placed the condition at 54.2 and the indicated crop at 14,008,000 bales, while a canvass of New York Cotton Exchange members taken on the Friday preceding the Government report of Monday had shown an average expectation of 14,018,000 bales. The Government report placing the condition at 53.2 and the indicated yield at 14,320,000 bales led to active liquidation by recent buyers who had expected that the decline in the crop prospect during August would be more pronounced than indicated by the falling off of only 22,000 bales in the official indication as compared with last month's figures. The figures also promoted a more active expression of the bearish sentiment which has been so much in evidence since last spring and the publication of the report was immediately followed by a break of about 50 to 57 points.

Offerings were absorbed on the decline by trade buying or covering, however, and there were rallies later when it appeared that the report had not caused any change of importance in the southern holding movement. This, at least, was the inference drawn from the continued small volume of hedge





Pages 186-1 .. to 186-30

What do you know about Reinforced Selvedge and Shadow Clock attachments? Do you know that they will improve the sales of your hosiery? Do you know that we can supply these attachments for any Reading Machine immediately and install them in a few days' time? Are you aware that "Reading" and *only* "Reading" can give you this valuable service?

All the parts and motions for these important attachments are illustrated and described in the new thirty-page supplement to the Reading Parts Catalog. Have you received your copy? If not, send for it today and keep yourself informed on the latest mechanical developments in the full-fashioned hosiery industry. You are entitled to *and should receive* this kind of service from your equipment manufacturer.

TEXTILE MACHINE WORKS
Reading, Pa.

The "READING" Full-Fashioned Knitting Machine

selling, and it may be assumed, perhaps, that bearish sentiment below or around the 11c. level is based more largely upon expectations of the usual "autumnal dip" resulting from the weight of the movement rather than on a long range view of the market, which would have to include some consideration of the acreage likely to be planted next spring. Volume of business tapered off somewhat on the rallies, but there were indications of some investment interest.

The Government's preliminary estimate of acreage abandoned since July 1, made it only 2.2% compared with a ten-year average of 3.5% and the official crop indication or yield per acre was based upon an acreage of 44,791,000 for harvest. The report of Aug. 8 was based on an assumed acreage for harvest of 44,250,000 acres. The Government's Sept. 1 indicated yield per acre was 153.2 lb., compared with 155.3 lb. at the end of July.

The report of the Census Bureau shows ginnings of 1,878,253 bales prior to Sept. 1 this year compared with 1,568,434 last year and the high record of 1,886,399 bales reported in 1925. These early ginning figures are not generally accepted as a safe index of the size of the crop but it shows that cotton has been passing rapidly through the gins; much more rapidly, it was said, than would be indicated by the volume of hedging.

The question before the trade so far as the market for the next 30 or 60 days is concerned may be largely concerned with whether the test of the spot situation which will inevitably come with the increasing movement, will be met by a corresponding increase in the holding, or result in increased offerings and lower prices. The Sept. 1 indication of course, is by no means the last word on the size of the crop. The latter has still before it the hazard of tropical storms and the frost date.

●

MEMPHIS, TENN., Sept. 8.—Inquiry from foreign and domestic sources for cotton increased slightly during the week, but most merchants regarded inquiry as merely for the purpose of keeping in touch with the market. In any event, little actual business resulted. Merchants were hoping the Government estimate would come somewhat under 14,000,000 bales, which, they said, would enable them to name a basis. Consequently the report was disappointing. Merchants have few orders to buy against and are not stocking any cotton; at the present time they are unable to buy on a tenderable basis and say that so long as the co-ops decline to make a definite statement as to their intentions, they will not buy except on a tenderable basis.

A local paper, a few days ago, carried a statement from a cotton merchant to the effect that the co-ops had sold 7,000 bales to a mill at a cent a pound under the market. This has set the local trade to wondering if the co-ops are selling to other mills at prices under the market and replacing—"hedging" the co-ops term it—their spots with futures; this, if true, they say, would go far toward explaining the indifference of mills to merchant offerings. There is hardly a doubt that mills, during the last few weeks have been besieged with mail, wire and personal solicitation which has met with little success.

New crop receipts are beginning to grow; present prospects are that cotton will go begging for buyers or be forced into hands of the co-ops unless mill demand picks up. The co-ops are offering to loan 90% of the value of $\frac{7}{8}$-in. cotton at the present market, but with deductions for storage and some other expenses that reduce the loan value materially. Growers are hesitant, to say the least. Some local shippers are offering to meet the co-op offer as to the percentage of value loaned and on somewhat more liberal terms than the co-ops offer. The shipper plan, in effect, amounts to selling on seller's call, a practice which was rather generally indulged in 1927 and which proved disastrous to many growers and troublesome to shippers.

Quotations on staple cottons were unchanged from the previous week; quotations are nominal owing both to lack of demand and lack of offerings. The weather during the week was dry over most of the belt; days were hot and the nights cool. It is too late now for rains to do good; wet weather would lower grades.

Domestic Wool Demand Broadens

Buying Not Confined To Immediate Needs in Firm Market

BOSTON.

DEMAND for wool is broader than for several weeks, and mill purchasing is no longer confined exclusively to worsted wools. Scoured wools which have been inert for several weeks are showing some life, and several sorts of pulled wools are moving more freely. Prices on all kinds are fully established on the level which has been in force for the last three months, and not a few observers express themselves as confident that after such a long period of stability the entire wool market will move upward to a better selling level. The market is resuming normalcy. The tendency to consider only the purchase of stocks that will be needed at once is going into the discard with the growing conviction that wool bought today will show a substantial enhancement in values within the next 60 to 90 days.

Manufacturers are evidently taking it for granted that they will have to rely this season on domestic wools to a large extent, and it can be assumed that realizing the firmness and tendency to higher prices they are building up their stocks of raw material at a time when there is a splendid selection offered. With domestic wool several cents per pound in the grease below the importing parity of foreign competing wools, after due allowance is made for the tariff, and with some descriptions at or below the cost of production, there seems to be a good opportunity of making a profit on current purchases.

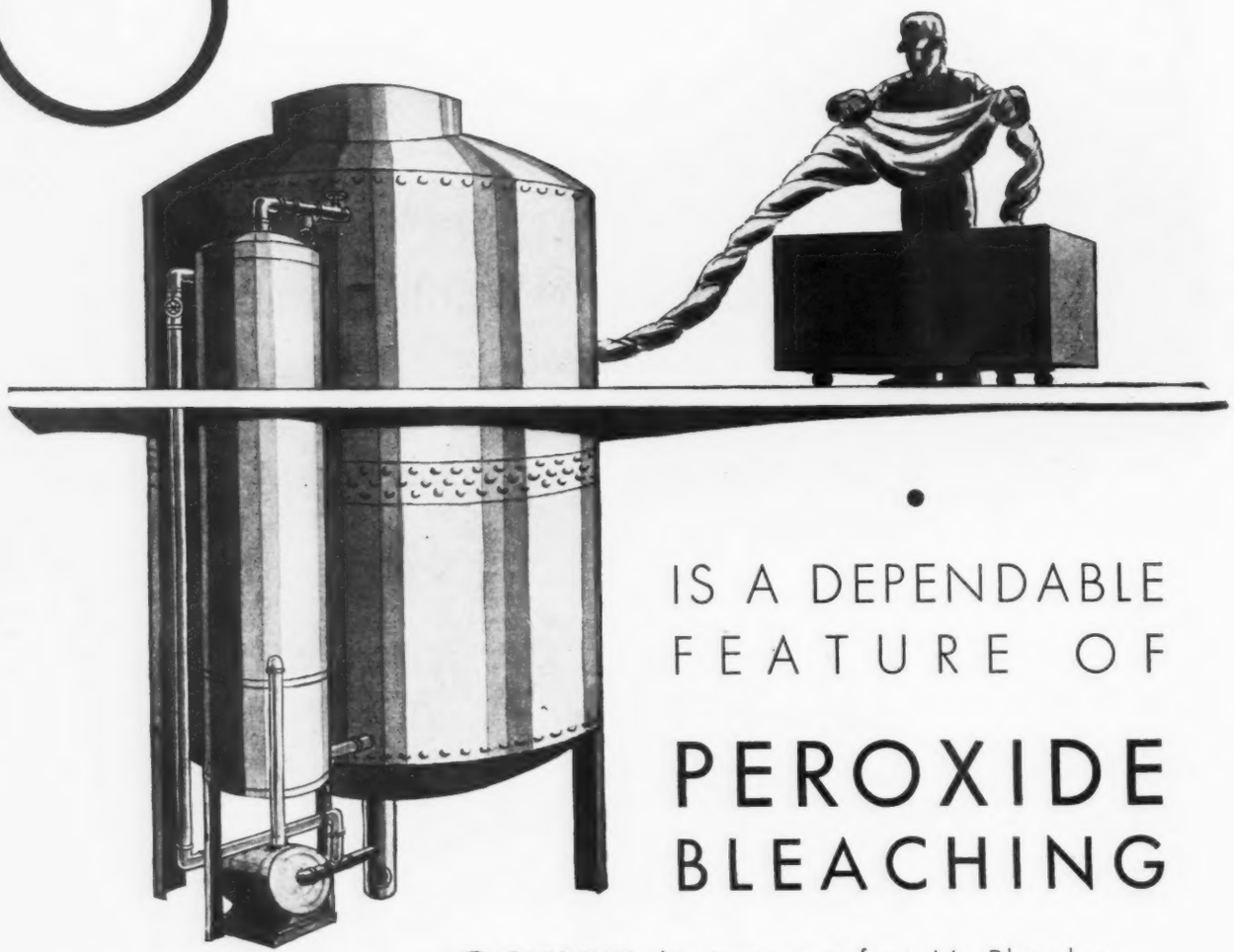
Wool dealers are showing a fair measure of optimism and are distinctly of the opinion that the market is likely to encounter rising values between now and the end of the year. There is, however, no expectation of any departure on the part of mills from the hand-to-mouth policy of buying, which has become a rather permanent feature in the industry since the war.

With the Australian season opening late in the month, it is important to note that the estimated Australian production of 2,650,000 bales for 1929-30 actually amounted to 2,728,000 bales, with the production of 950,000 bales in South Africa as against 832,000 bales for 1928-29. Notwithstanding continued abstention of the United States, these great quantities, which are about one-third more than were the largest pre-war clips, have been readily absorbed in the face of a financial world crisis and of political disturbances in China and India. American demand for British grown wools showed a decline of approximately 5,000,000 lb. for the six months ending June 30, as compared with the first half of 1929. Little of the new Devon, Lincoln, or Scotch Blackface clips has been shipped to Boston. American mills have in past years been large buyers of English pulled lambs, but there have been no shipments thus far this season to the United States.

TARIFF STOPS RAG IMPORTS

The situation in rags and reworks continues to move slowly in the direction of better business, but the buying of both these types of raw materials is still below normal for this period of the year. Rag prices have ceased to decline and are as a matter of fact showing a slight upward tendency. Recovered wool manufacturers during the last several weeks have maintained a firm front and while they have been able to buy good types of rags at almost bargain prices, they have not seen fit to cut their prices for processed products down to their cost as based upon low rag values. Quotations on standard reworks have been somewhat out of the line with low

UNIFORMITY



IS A DEPENDABLE FEATURE OF

PEROXIDE BLEACHING

R&H

ALBONE (25 vol.)
ALBONE "C"
(100 vol. electrolytic)
PERBORATES
HYDROGEN PEROXIDE
SOLOZONE (130 vol.)

CONSIDER this important fact, Mr. Bleacher.... Peroxide Bleaching always produces a good, marketable white.

Peroxide Bleaching always produces a good white for use as a dye bottom or base.

Write for information on adapting, at little expense, any kier for the R & H System of Peroxide bleaching. The cost of old and new methods are thereby equalized.

At the Southern Textile Exposition, Greenville, S. C, October 20th to 25th inclusive, visit our Booths Nos. 311, 312 and 313

The ROESSLER & HASSLACHER CHEMICAL CO.
INCORPORATED
10 East 40th Street, New York, N. Y.

rag values, but, as these quotations have been nominal and practically untested by any business in volume, it is impossible to say what concessions might have been obtained by consumers who had actual business to place.

Imports since the new tariff went into effect have been negligible, about 100 bales of clips arriving in Boston during the last two months. One of the most striking examples of the operation of the tariff is seen in English exports of wool rags into the United States. In February this year the total shipments were valued at £78,320, while in July the total value of the shipments was £677.

Mill Wastes Move Slowly

The wool waste market is more hopeful and is encouraged by renewed interest of mill buyers in some of the long neglected colored wastes as well as in the higher grade fine white laps and threads. Prices have shown little change for the last month and while buyers occasionally have been able to get a cent or two off this has not been general. The market believes that, however long delayed, there must ultimately be substantial mill buying.

The Bradford waste market is sensitive and there are many irregularities in quotations. With the low level of values now ruling for all classes, it is felt that even with the higher tariff in the United States there should be some inducement for Boston houses to operate on a large scale.

Merino Noils Feature By-Products

There has not appeared to date that expansion of mill interest in noils that must appear if the market is to maintain itself on current price level. Larger wool buying is considered suggestive of eventual betterment, particularly as the recent buying has broadened so as to include those types of wool closely identified with carded woolen fabrics.

Demand is still running to fine noils including some of the imported Capes. The imported noil is said to bring more than 60c. per pound. In Germany, where there is a steady demand for the fine merinos, the Capes are now selling better than the Australians. In the French markets fine noils are scarce but other descriptions are in good supply though slow of sale, with prices very generally in the buyer's favor. The Bradford market for these wool by-products is now on a reasonable level.

Raw Silk Prices Uneven

Spotty Condition Prevails; Some Firms See Improvement

RAW silk is soft once more and the current week has been discouraging. Neither weavers nor knitters show any tendency toward confident buying. Orders are placed only after much negotiation and, in some cases, special concessions. Some importers find strength in high-grade 13/15s and 20/22s, due to the fact that much of the stock available in New York is poorly assorted, and it is difficult to get certain sizes in the best grades. All orders are spot and small and though importers are more confident regarding the credit of their broadsilk customers, they are still selling cautiously. Factors deprecate the likelihood of further difficulty among broadsilk mills and urge less discussion along this line, "as it has a bad psychological effect."

Paradoxically enough, there seems to be a better undertone. It is due mostly to the belief that manufacturers, having curtailed all summer now have small stocks and will be compelled to increase output for winter business. Hosiery mills, one exception to the prevailing indifference, are using larger quantities of grenadine twist yarns and this has stimulated demand at the raw silk end. Here, too, orders are small and confined to nearby months.

Not all importers are pessimistic; some find a more confident tone among outlets and a lessening of the price emphasis. They see the week's lull as temporary and point out that any progress would be bound to be accompanied by fluctuations. The strongest element at present is the low inventory situation among both mills and distributors, which makes for a better basic feeling despite underselling. Overproduction of raw silk, of course, continues a main source of trouble, but this would be offset, partially at least, by a pickup in retail movement of finished silk products.

The week was very quiet, with prices uncertain. There was only one sale, a single 10-bale contract, on Sept. 3, and this situation was duplicated on Sept. 9. Futures were steady when the week opened but weakened and remained weak until Tuesday when they firmed slightly. Japanese markets were steady to irregular all week.

◆Winter Underwear Sales 50% Behind

CONTINUED delay by mills in announcing their prices of 1931 lightweight underwear, keeps buyer interest focused upon the heavyweights; these latter lines are in active demand, and mills are busy filling orders. All contracts are small and for immediate shipment.

The shortage of stocks in mills has not stimulated buyer demand to any extent; both jobbers and retailers seem determined to keep their own stocks confind to day by day requirements. They are throwing the onus of the situation onto the mills, with the result that a real cold spell would bring a jam of spot business that some mills would be unable to handle. Heavyweight factors look for something of this sort to develop next month. The heavyweight turnover to date is very unsatisfactory; sales are 50% of normal, and the current rate of buying, while adequate in an ordinary season, is not sufficient to make up for the poor beginning.

Spring cotton lightweights are opening very slowly; the bulk of the trade is expected to begin showing lines next week. Indications are that prices will be about 10% below last year which would represent the decline in the cotton yarn market.

◆Sweaters Move Spiritedly

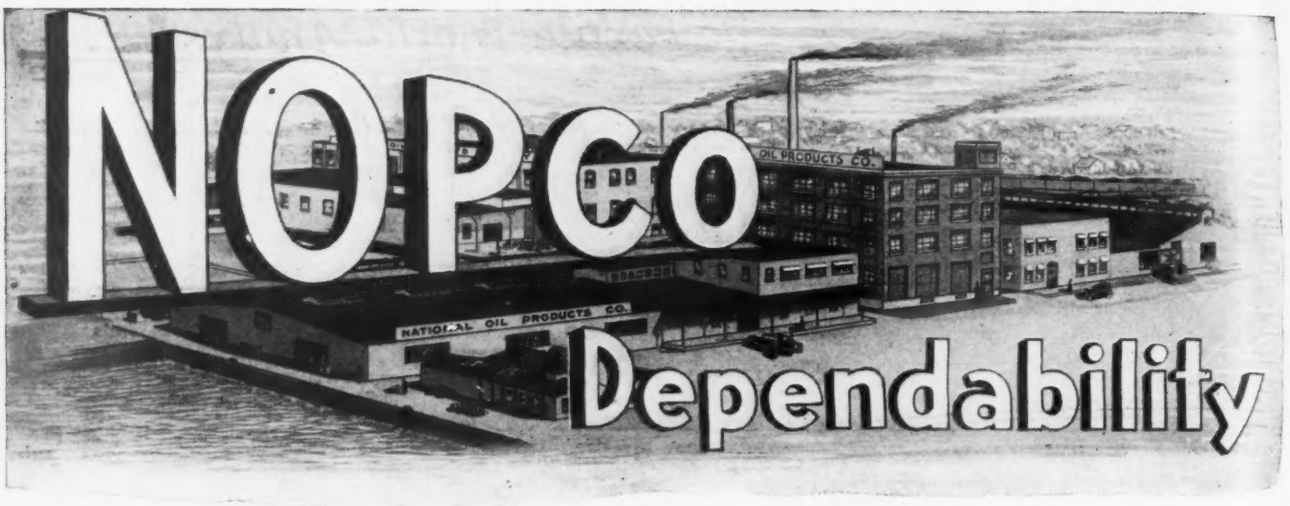
LIVELY interest is being shown by jobbers and retailers in the knitted outerwear market. Good-sized orders for fancy sweaters are coming in, and though business is unevenly divided, some mills complaining of slow turnover, especially on the 1931 bathing-suit lines, the outlook is much better.

Sweaters are selling spiritedly all along the line, and mill stocks being light, buyers have difficulty in getting exactly what they want. The bulk of the orders fall in the fancy sweater range; crickets are emphasized, baby shakers are in moderate demand; some mills are refusing business prior to Oct. 10 on women's ribbed coats. Supplies of fancy sweaters in stores are light, and buyers are anxious to fill their lines at once. Practically all buying is for spot—when they can get it. The pressure for quick delivery is so acute that, as one mill man put it, "they seem to want the goods shipped the day before they buy 'em."

Sweater buyers are still apprehensive of early winter prospects, and resist the best efforts of the mills to persuade them to future commitments. Prices are firm, however; confidence is stronger, and a brief spell, say a week, of cold weather might bring sweater sales up to something like normal. The one drawback is at the staples end. Staple sweaters are moving well, but they started so late that there is scant likelihood of making up for the poor beginning.

Zephyrs Favored

Bathing-suit demand has strengthened, and part of the industry is placing fair business, for next summer. There is a preference for zephyrs in ribs and jerseys. Women's two-piece suits in gay colors are popular; orders to date accent greens, blues, orange-and-yellow mixtures. If preliminary business is any indication, women are going to wear mostly athletic type suits, next season. Mill men note a tendency away from the tight-fitting trunks and toward



A Series of Advertisements on Reasons Why Rayon Manufacturers Should Use TEXTOYL 1556.

Reason No. 3—

Prevents Defects Due to Oxidation

No Discoloration of Rayon—No Gumming—No Offensive Odor

Oxidation is the cause of three serious troubles which worry the rayon manufacturer. These are: discoloration, gumming and offensive odor. All can be prevented by using the new Rayon Oil, TEXTOYL 1556, recently developed in the NOPCO Research Laboratories.

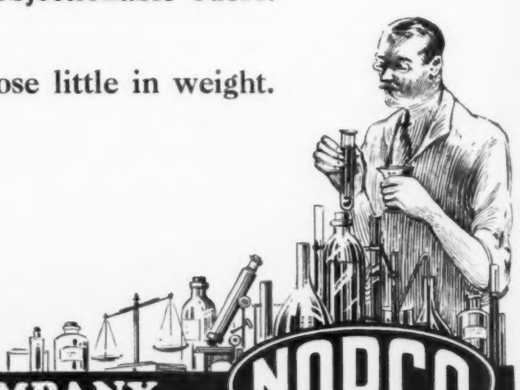
TEXTOYL 1556 is highly resistant to oxidation. This has been proved by passing air bubbles through the oil at atmospheric temperature. At the end of the bubbling operation, TEXTOYL 1556 was found unchanged. Other rayon oils completely broke down when subjected to the same test which is equivalent to long exposure to the atmosphere.

Other Advantages of TEXTOYL 1556:

Is practically neutral—does not corrode needles.
Resists rancidity—can be stored without developing objectionable odors.
Has low viscosity—gives good penetration.
Has low moisture content—rayons treated with it lose little in weight.
Is highly emulsifiable—scours off easily.
Does not tender or weaken rayon upon storing.

Ask for demonstration in your own plant.

Write for booklet completely describing TEXTOYL 1556



NATIONAL OIL PRODUCTS COMPANY, Inc.
EXECUTIVE OFFICES AND FACTORY **HARRISON, N. J.** BOSTON, MASS. CHICAGO, ILL. ST. JOHNS NEWFOUNDLAND

the loose plaited types. Bathing-suit production is still light; some are making samples, but most mills are still busy on sweater production.

Considering that some mills have not yet completed their new bathing-suit lines, the buyer response to date has been very satisfactory.

Hope for Hosiery Stability

F.-F. Cut May Be Final For Season—Fair Buying

FULL-FASHIONED hosiery prices show signs of slowly approaching stability. The latest reduction which ran from 75c. to $1.50 in the line of a leading producer, is regarded by Worth Street with an air of finality. Buyers, to be sure, are not yet convinced that prices are at bottom, but orders this week indicate increased confidence. Considerable future business is being placed, usually four to five weeks ahead, which is a healthy sign. Buyers are still fighting shy of winter contracts, and are very backward in placing their Christmas orders. Very little Christmas business has been placed so far, though usually at this time, holiday buying is a big feature. Mills are resigned to the prospect of delayed holiday contracts; the main problem is to gauge production in accordance with the uncertain outlook on that score. Unless production takes an unexpected jump shortly, the mills should approach the holiday season with only moderate stocks, and a rush of last-minute contracts in October would bring difficulties.

GRENADINES STEADY

Grenadine hosiery moves steadily, with some evidence of strengthening. Several firms dropped this line but have since taken it up again; current outlook for grenadines is fair; the possibilities of the twist yarn numbers as a Christmas proposition are considered good, and once holiday buying starts, this line should show activity.

Half-hose buyers are placing orders for the medium-priced numbers, showing particular interest in polka dot designs. Half-hose to retail at 50c. was an active seller this week. Prices are still weak, and there is much bargaining, especially in the 25c. and 35c. ranges, but mill men are optimistic that the end of the month will bring improvement. Woolen half-hose is selling well, both spot and future.

◆Late Wool Goods Openings Expected

SPRING openings are still hanging fire in the wool goods market. Sept. 15 has been named as a tentative date for naming new prices on fancy suitings, but it would not be surprising if many held off until a week later. While there have been early operators anxious to view new offerings, there is no strong indication that clothing manufacturers are at a point where they are able to devote the necessary time to consider new fabrics.

With openings so close at hand it is natural that buying should be slow. Manufacturers are purchasing just enough goods to carry them from day to day and no more. Overcoatings are somewhat less active as garment makers have enough goods on hand for the present.

Spot goods are becoming increasingly scarce according to selling agents, possibly more so than the average buyer realizes. For months the industry has been running so close to an order basis that stocks, never plentiful this year, have diminished steadily. Even though it would mean lost business, a number of mill men would take keen delight in getting back on the driver's seat and telling buyers that goods were unavailable.

Pronounced activity continued in certain women's wear lines. Various dress goods items were badly wanted for spot shipments with supplies inadequate. Cutters anxious to get in on some of the most popular lines found that original buyers were sending in reorders and would be taken care of first. The most wanted numbers included printed challis, crepes and a few of the more attractive worsted-rayon cloths. This interest does not extend into the new season.

Goods Unchanged After Report

Buyers Commend Steadiness Of Gray Goods Prices

THE September cotton crop report has become a thing of the past without any appreciable effect on the cotton goods market. In the raw material field it precipitated a drop of $2 a bale, but fabric prices are holding firm and sellers expect to keep them so.

Gray goods trading kept up in good volume until the actual hour of the report when it turned quiet and remained so until mid-week. Sellers took much heart from the action of the market and even in the face of lower cotton do not expect to see any decline in piece goods quotations. This strong position of the mills is founded on two main facts. The continued curtailment will limit output for the next two months and considerably heavier sales since the middle of August has helped to reduce stocks on hand. Unless some weak holders become excited and run amuck there is no expectancy of softness at the fabric end.

It was announced that denim prices will be maintained at the 12½c. level for September and October delivery. This lays to rest rumors that have cropped up since substandard makes have been sold at concessions.

Gray goods trading last week was somewhat broader although print cloths were still the leaders. Twills, sateens and certain sheeting constructions showed more pep than they had for several weeks. In the majority of cases, mills were able to secure fairly good prices.

Around the middle of the current week there were the customary number of low bids, generally thought to be "feelers." There was no pronounced bear pressure from buyers and as a rule they seemed willing to let well enough alone. Many of them expressed gratification that sellers were maintaining a firm front in the matter of price.

◆Broadsilk Market Slightly Firmer

CUTTERS and retailers are showing greater interest in broadsilks and if it were not for a break in the price of canton crepes this week, fabric houses would be thoroughly satisfied with the situation. The tone is stronger; buying is still spot, it is true, but manufacturers are gradually increasing their output of finished garments. Except for cantons, prices have shown a firming tendency. Stocks in fabric mills are only moderate and there is no acute pressure to realize.

Flat chiffons and georgettes became active this week, considerable business being placed on these lines by cutters. Buyers comment that they find difficulty in moving stocks to retailers and that once the store turnover improves they will increase output.

Piece goods buyers are in the market for canton crepes in green, brown, wine shades and black. Satins also are in good call, usually in shades parallel to cantons. Georgettes have been moving well at the counters retailers report, and they are placing reorders.

QUOTATIONS

at close of business, Sept. 10, 1930
Prices cover average qualities unless otherwise stated

Cotton Goods

	Sept. 10	Sept. 3	Sept. 11 1929
PRINT CLOTHS			
27 -in., 64x60, 7.60	4–4¼c.	4c.	5½– 5¾c.
38½-in., 64x60, 5.35	5¼c.	5¼–5¼c.	7½– 7⅝c.
39 -in., 68x72, 4.75	6c.	5¾– 6c.	8½– 8⅝c.
39 -in., 72x76, 4.25	6¾–6¾c.	6¾c.	9¼c.
39 -in., 80x80, 4.00	7¼c.	7¼–7¼c.	10¼–10¼c.
BROWN SHEETINGS			
36-in., 56x60, 4.00	6¼c.	6¼c.	8¼c.
36-in., 48x48, 3.00	7¼–7¼c.	7¼–7¼c.	10¼c.
37-in., 48x48, 4.00	5¾c.	5¾c.	8¾–8¼c.
PAJAMA CHECKS			
36½-in., 72x80, 4.70	6c.	6c.	9¼c.
36½-in., 64x60, 5.75	5c.	5c.	7⅜c.
MISCELLANEOUS			
Drills, 37-in., 3 yd	7¾c.	8 c.	10¼c.
Denims, 2.20	12½c.	12½c.	17 c.
Tickings, 8 oz	16 c.	16 c.	22–23½c.
Standard prints	8 c.	8 c.	9½c.
Eastern staple ginghams, 27-in.	10 c.	10 c.	10 c

Cotton Waste

Peeler comber	9 — 9¼
Peeler strips	8 — 8½
Sak. comber	8 — 8½
Choice willowed fly	4½— 5½
Choice willowed picker	3 — 4½
Sak. strips	11 —11½
Linters (mill run)	2½— 3½
White spooler (single)	8 — 8½

Cotton Yarn

(Carded yarn quotations are nominal)

CARDED (Average Quality)

Double Carded 2c.–4c. higher according to quality

SINGLE SKEINS OR TUBES (Warp Twist)

4s to 8s	$0.20 – .20½	20s	$0.22½– .23
10s	.20 – .20½	24s	.25 – .25½
12s	.21 – .21½	26s	.26 – .26½
14s	.21½ – .22	30s	.27¼– .28
20s	.22 – .22½	40s ex.qual.	.40 – .41

TWO-PLY SKEINS AND TUBES

8s-2	$0.20½– .21	26s-2	$0.26½– .27
10s-2	– .21	30s-2	.27½– .28
12s-2	.21½– .22	36s-2	.34 – .35
14s-2	.22 – .22½	40s-2	.36 – .37
16s-2	– .22½	40s-2 hi. blk.	.39 – .40
20s-2	.22½– .23	50s-2	– .45
24s-2	.25 – .26	60s-2	.53 – .54

SINGLE WARP

10s	$0.21	24s	$0.25½
12s	– .21½	26s	– .26½
14s	– .22	30s	.27½– .28
16s	– .22½	40s ex. qual.	– .41
20s	– .23		

TWO-PLY WARPS

8s-2	$0.21 – .21½	24s-2	$0.25½– .26
10s-2	.21½ – .22	26s-2	.26½– .27
12s-2	.22 – .22½	30s-2	– .28
14s-2	– .22½	40s-2 ordin.	.36 – .36½
16s-2	.22½ – .23	50s-2	– .46
20s-2	.22½ – .23	60s-2	– .54

8s-3 and 4-ply skeins and tubes; tinged, 18-18½; white, 19½-20; waste 16½-17

HOSIERY CONES (Frame Spun)

8s	$0.20 – .20½	22s	$0.23½– .24
10s	– .20½	24s	.25 – .25½
12s	– .21	26s	.26½– .27
14s	– .21½	30s tying	.27½– .28
16s	– .22	30s reg.	– .29
18s	– .22½	30s ex. qual.	– .31½
20s	– .23	40s	– .36

COMBED PEELER (Average Quality)

TWO-PLY—(Knitting Twist) Cones

20s-2	$0.35½– .36	60s-2	$0.55½– .56
30s-2	.40½– .41	70s-2	.65 – .66
36s-2	.41½– .42	80s-2	.77½– .78
40s-2	.43½– .44	90s-2	.92 – .95
50s-2	.48½– .49	100s-2	1.15 –1.18

WARPS, SKEINS AND CONES

TWO-PLY—(Warp Twist)

20s-2	$0.36 – .37	60s-2	$0.56 – .57
30s-2	.41 – .42	70s-2	.66 – .67
36s-2	.42 – .43	80s-2	.77½ – .78
40s-2	.44 – .45	90s-2	.97 –1.00
50s-2	.49 – .50	100s-2	1.20 –1.25

SINGLES

12s	$0.29½	30s	$0.39 – .39½
14s	– .30	38s	– .42
16s	– .30½	40s	– .43
18s	– .31	50s	.48 – .49
20s	– .32	60s	.54½ .55
24s	– .34½	70s	.64 – .65
28s	.37½– .38	80s	.77 – .78

MERCERIZED CONES—(Combed, Ungassed)

26s-2	$0.52 – .53	90s-2	$1.31 – 1.33
30s-2	.54 – .55	100s-2	1.61 – 1.63
36s-2	.57 – .58	120s-2	2.01 – 2.04
40s-2	.60 – .61	30s	– .67
45s-2	.62 – .64	40s	– .72
50s-2	.64 – .66	50s	– .79
60s-2	.72 – .74	60s	– .87
70s-2	.84 – .86	70s	– .99
80s-2	.96 –1.01	80s	–1.21

Cotton Prices and Statistics

COTTON STATISTICAL DATA

(Fluctuations of Futures)

	Closed Sept. 4	For Week High	For Week Low	Closed Sept. 10	Net Chge.
September	11.29	11.52	11.00	11.35	+.06
October	11.40	11.68	10.98	11.47	+.07
November	11.48	11.69	11.16	11.57	+.09
December	11.57	11.81	10.92	11.48	—.09
January	11.69	11.90	11.26	11.72	+.03
February	11.53	11.73	11.21	11.63	+.10
March	11.61	11.82	11.17	11.75	+.14
April	11.70	11.88	11.38	11.80	+.10
May	11.80	12.00	11.34	11.88	+.08
June	11.86	12.05	11.54	11.94	+.08
July	11.95	12.16	11.51	12.02	+.07

SPOT FLUCTUATIONS FOR WEEK

(Middling)

	New York	New Orleans	Liverpool
Friday, Sept. 5	11.65	11.12	6.48
Saturday, Sept. 6	11.55	11.03	6.53
Monday, Sept. 8	11.15	10.60	6.49
Tuesday, Sept. 9	11.20	10.74	6.18
Wednesday, Sept. 10	11.50	11.00	6.40
Thursday, Sept. 11	11.30	10.83	6.40

SPOT FLUCTUATIONS AND STOCKS

Markets	Sept. 9	Sept. 10	Sales	Stocks This Week	Stocks Last Year
Galveston	11.00	11.25	4,116	228,943	123,017
New Orleans	10.89	11.00	35,531	330,743	98,646
Mobile	10.35	10.45	7,670	20,204	23,637
Savannah	10.52	10.72	18,664	179,854	66,395
Norfolk	11.25	11.25	19	42,208	17,537
New York	11.40	11.50	300	236,941	101,169
Augusta	10.38	10.69	3,539	68,965	42,892
Memphis	10.00	10.25	6,025	129,507	42,209
St. Louis	10.10	10.10	.....	1,808	5,367
Houston	11.00	11.20	71,721	693,264	224,629
Dallas	10.40	10.50	62,616	4,117	1,864

Liverpool, 6.40d.

BASIS MIDDLING

	Saturday, Sept. 6	Saturday, Aug. 30
10 markets average	10.73	10.60
Memphis	10.30	10.10

PREMIUM STAPLES

First Sales from Factors Tables at Memphis

Grade Strict Middling	Prices Nominal
1⅛-in	12.65 = 12.95c.
1 3/16-in	14.70 = 14.95c.
1¼-in	20.00 = 20.50c.

CURRENT SALES

	For Week	Prev. Year	Week Before
Memphis total	3,179	3,346	2,848
F.o.b. included in total	3,169	3,345	2,832
10 markets	128,292	103,468	74,319

MEMPHIS RECEIPTS, SHIPMENTS, ETC.

	For Week	Last Year	Year Before
Net receipts	1,224	1,195	209
Gross receipts	5,595	6,469	3,970
Total since Aug. 1, net	4,276	4,430	3,517
Shipments	7,728	6,545	7,382
Total since Aug. 1	49,368	38,855	49,236
Total stock	127,777	37,186	57,108
Decrease for week	2,133	76	3,412
Unsold stock in hands of Memphis factors	26,250	5,058	.....
Decrease for week	793	*1,250	.....

* Increase.

AVERAGE PRICE SEPT.–OCT SHIPMENT HARD WESTERN COTTON

F. o. b New England

	Middling	St. Middling
1 1/16 in	13¾–14¼c.	14¼–14¾c.
1⅛ in	14¼–14¾c.	15 –15¾c.
1 3/16 in	16 –17 c.	17 –18 c.
1¼ in	21½–23 c.	23 –24 c.

Basis on New York, New December, 11.45c.

DIFFERENCES ON AND OFF MIDDLING

WHITE GRADES

	Dallas	Memphis	Montgomery	Augusta	Average
M. F	1.05†	1.00†	1.00†	1.00†	0.86†
S. G. M	.90†	.85†	.90†	.88†	.70†
G. M	.75†	.75†	.75†	.75†	.52†
S. M	.50†	.50†	.50†	.50†	.33†
S. L. M	.75*	.65*	.65*	.75*	.71*
L. M	1.75*	1.75*	1.50*	2.00*	1.73*
S. G. O.**	3.00*	2.75*	2.50*	3.25*	2.88*
G. O	3.00*	2.75*	2.50*	3.25*	3.90*

YELLOW TINGED

G. M	0.50*	0.25*	0.50*	0.50*	0.58*
S. M	1.00*	.75*	1.00*	1.00*	1.05*
M.**	1.75*	1.25*	1.50*	1.50*	1.68*
S. L. M	2.50*	1.75*	2.25*	2.25*	2.40*
L. M.**	3.50*	2.25*	3.00*	3.00*	3.30*

YELLOW STAINED

G. M	1.50*	1.75*	1.50*	1.50*	1.58*
S. M.**	2.25*	2.50*	2.50*	2.50*	2.40*
M.**	3.00*	3.00*	3.50*	3.50*	3.23

BLUE STAINED

M. G.**	1.75*	1.50*	1.75*	1.75*	1.78*
S. M.**	2.25*	2.25*	2.75*	2.75*	2.50*
M.**	3.00*	2.75*	3.75*	3.75*	3.28*

**Grades not deliverable on contract. †On Middling *Off Middling.

EGYPTIAN COTTON

Alexandria Exchange, Sept. 10		Change
November Sak	19.15	+0.16
October uppers	13.13	+0.10

SEPT.-OCT. SHIPMENT c. i. f. BOSTON

(Tariff not included)	(Prices Nominal)
Fully good fair Sak	23.00
Fully good fair to good Uppers	16.35

(By Anderson, Clayton & Co.)

Wool

OHIO, PENNSYLVANIA AND WEST VIRGINIA (IN GREASE)

Fine delne..	$0.31 –$0.31½	¾ blood.....	$0.29 –$0.30
Fine clthg ..	.23 – .24	¼ blood.....	.30 – .31
½ blood.....	.30 – .30		

TEXAS AND CALIFORNIA (CLEAN BASIS)

Texas, 12 months	$0.73 –$0.75
California, Northern	.65 – .68

PULLED—EASTERN (CLEAN BASIS)

A.A.....	$0.77 –$0.80	B-Super...	$0.55 –$0.60
A-Super....	.65 – .68	C-Super...	.50 – .55

MONTANA, IDAHO AND WYOMING (CLEAN BASIS)

Staple fine	$0.75 –$0.78
Staple ½ bld	.70 – .73
Fine and fine medium	.70 – .72
¾ blood	.60 – .63
¼ blood	.57 – .60

MOHAIR—DOMESTIC

Best Carding	$0.35 –$0.38
Best combing	.50 – .52

MOHAIR FOREIGN (IN BOND)

Turkey fair, average	$0.25 –$0.28
Cape firsts	.25 – .28

FOREIGN CLOTHING AND COMBING (CLEAN BASIS IN BOND)

Australia:	
70s	$0.65 –$0.70
64s	.53 – .55
58s-60s	.46 – .48

(IN GREASE)

Montevideo:	
58s-60s	$0.25 –$0.26
56s	.25 – .26
50s	.23 – .24
Buenos Aires:	
4s, 40-44s	$0.22 –$0.23
5s, 36-40s	.20 – .21

FOREIGN CARPET (GREASE BASIS IN BOND) SCOURED

Aleppo	$0.28 –$0.29
China: Combing No. 1	.16 – .17
China Filling Fleece	.15 – .16
Szechuen ass't	.15
Cordova	.15 – .16
Scotch black face	.19 – .20
East India: Kandahar	.23 – .24
Vican'r	.27 – .28
Joria	.27 – .29

Worsted Yarns

ENGLISH SYSTEM WEAVING

2-20s, 36s	$0.92½–$0.95
2-24s, 40s	1.02½– 1.05
2-26s, 44s	1.10 – 1.12½
2-28s, 46s	1.15 – 1.17½
2-30s, 48s	1.20 – 1.22½
2-32s, 50s	1.25 – 1.27½

(Single yarns 5c. less than above)

2-36s, 58s	$1.35 –$1.40
2-40s, 60s	1.45 – 1.47½
2-40s, 64s	1.50 – 1.52½
2-50s, 66s	1.65 – 1.70
2-60s, 70s	2.15 – 2.20

ENGLISH SYSTEM KNITTING

2-20s, 44s in oil	$0.95
2-20s, 48s in oil	1.00 – 1.02½
2-20s, 50s in oil	1.05
2-20s, 56s in oil	1.15
2-20s, 60s in oil	1.30
2-20s, 64s in oil	1.35 1.3?½
1-15s, 46s dyed	1.15 – 1.17½
1-15s, 48s dyed	1.17½– 1.20
1-15s, 50s dyed	1.20 – 1.22½

(Oil yarns 17½c. less)

FRENCH SYSTEM

1-20s, 58s	$1.20 –$1.22½
1-20s, 60s	1.25 – 1.27½
1-18s, 64s, Dyed	1.52½– 1.55
1-26s, 64s	1.27½– 1.30
1-30s, 60s, Warp	1.40 – 1.42½
1-30s, 64s, Warp	1.42½– 1.45
2-30s, 64s, Fancy mixes	1.70 – 1.72½
2-40s, 64s, Zephyrs	1.60 – 1.65
1-50s, 66s	1.62½– 1.65
2-50s, 66s	1.80 – 1.82½
1-60s, 70s	1.95 – 2.00
2-60s, 70s	2.10 – 2.15

FRENCH SPUN MERINO WHITE

1-30s, 50-50-58s on cops	$1.05 –$1.07½
1-40s, 50-50-60s on cops	1.20 – 1.25
1-40s, 50-50-64s on cops	1.22½– 1.25
1-40s, 50-50-64s Australian cops	1.25 – 1.30

Underwear mixes, 3c. additional.
Solid color, 35c. additional.

Tops and Noils

TOPS—BOSTON

Fine (64-66s)	$0.98–$1.00
Half-blood (60-62s)	.88– .92
High ¾ blood (58s)	.83– .85
Aver. ¾ blood (56s)	.80– .83
Low ¾ blood	.73– .78
High ¼ blood (50s)	.70– .72
46s S. A. and N. Z.	.65– .66
44s S. A. and N. Z.	.62– .65
40s S. A. and N. Z.	.58– .60

TOPS—BRADFORD, ENG. (SEPT. 8)

Fine (70s)	31½d	¾ bld. (56s)	19½d
Fine (64s)	28 d	½ bld. (50s)	16½d
½ bld. (60s)	26 d	Cross-bred (46s)	15 d
¾ bld. low (58s)	22½d		

NOILS—BOSTON

Fine	$0.57–$0.60	High ½ bld..	$0.44–$0.47
Half-bld	.53– .55	Low noils...	.40– .42
Aver. ¾ bld..	.45– .48	Medium colored...	.40– .42
Fine colored.	.46– .48		

Wool Substitutes

WOOL WASTE

Lap, fine white	$0.80 –$0.83
Lap, fine colored	.58 – .60
Hard ends, fine white	.60 – .63
Hard ends, ¼ blood white	.40 – .43
Hard ends, fine colored	.28 – .30
Hard ends, medium colored	.23 – .25
Card, fine white	.30 – .33
Burr, fine Carbonizing	.38 – .40

OLD WOOLEN RAGS (GRADED FOR MFRS.)

Merinos, Coarse Light	$0.06 –$0.07
Merinos, Fine Dark	.04½– .05
Merinos, Fine Light	.14 – .14½
Serges, Blue	.07½– .08
Serges, Black	.07 – .08
Serges, Red	.11 – .11½
Knit, White	.29 – .30
Knit, red	.15 – .16
Knit, Light Hoods	.14 – .15
Worsted, Light	.05½– .06
Worsted, Blue	.07½– .08
Worsted, Black	.07½– .08

Silk Yarns

THROWN SILK (60 day basis)

	Nominal
Japan organzine, 2 thd. grand XX in skeins	$4.55
Japan organzine, 2 thd. sp. crack in skeins	4.35
Japan crepe, 3 thd. grand XX in bobbins	4.65
Japan crepe, 3 thd. sp. crack on bobbins	4.45
Japan crepe, 4 thd. crack on bobbins	4.15
Canton crepe, 3 & 4 thd. ns. 14/16 on bobbins	2.87½
Tussah tram, 2 end on cops	2.15
Hosiery tram, 3 thd. Japan XXX	5.45
Hosiery tram, 4 thd. Japan, selec. grd. XX	4.50
Hosiery tram, sp. crack XX	3.95
Hosiery tram, crack XX	3.90
Hosiery tram, XX	3.50

SPUN SILK YARNS—(Terms: net 30)

40/2	$3.45	60/2	$3.80
50/2	3.65	62/1	2.80

Raw Silk

(60 day basis)
Prices Nominal

	13/15 White	20/22 White	20/22 Yellow
Super Grand, 86/88%	$3.85	$3.10	$2.90
Special Grand, 85%	3.60	3.05	2.85
Grand XX, 83%	3.40	2.95	2.80
Special Crack, 81%	3.25	2.90	2.75
Crack XX, 78%	3.10	2.85	2.70
Extra Extra, 73%	3.00	2.80	2.65
Best Extra, 68%	2.85	2.75	2.60

Canton filature, new style, 14/16	$1.95
Canton filature, new style, 20/22	1.80
Tussah filature, 8 cocoon	1.60

NATIONAL RAW SILK EXCHANGE

	Close Sept. 3	For the Week High	For the Week Low	Close Sept. 9	Net Chge
September	2.88	2.88	2.70	2.85	—.03
October	2.80	2.80	2.69	2.75	—.05
November	2.78	2.78	2.66	2.70	—.08
December	2.77	2.77	2.66	2.70	—.07
January	2.77	2.77	2.68	2.70	—.07
February	2.78	2.78	2.66	2.70	—.08
March	2.77	2.77	2.68	2.70	—.07
April	2.78	2.78	2.68	2.70	—.08

Sept. 3 to Sept. 9—Total contracts, 315. Total number of bales, 3,150. Total approximate value, $1,102,500.

Domestic Rayon

VISCOSE PROCESS

Denier	Filament		First Qual.	Second Qual.
50	14		$2.15	$1.95
75	18		1.60	1.50
75	30		1.70	1.60
100	18		1.25	1.15
100	40		1.30	1.20
125	36–50		1.20	1.10
150	24–30		.95	.90
150	36–40		1.00	.95
150	60		1.15	1.10
150	75–90		1.20	1.15
170	24–27		.95	.90
170	60		1.15	1.10
200	30		.90	.85
200	35–40		.90	.85
200	75–80		1.10	1.05
300	44–60		.78	.75
450	54–60		.78	.75
600	72–96		.78	.75
900	100–144		.78	.75

NITRO-CELLULOSE PROCESS

Denier	First Qual.	Second Qual.	Denier	First Qual.	Second Qual.
75	$1.60	$1.50	150	$0.95	$0.90
100	1.25	1.15	175	.95	.90
125	1.20	1.10			

CUPRAMMONIUM PROCESS

Denier	Filament	Price	Denier	Filament	Price
15	25	$3.10	40	30	$2.40
25	25	2.85	52	30	2.20
30	25	2.60			

(Due to diversified offerings prices for higher denier are not listed here.)

ACETATE PROCESS

Denier	Price	Denier	Price
45	$2.25 2.75	120	$1.90
55	2.05–2.55	150	1.40–1.85
75	1.80–2.70	200	1.55
100	1.65–2.45	300	1.50

Rayon Waste

Prices Nominal

Open bleached waste	–$0.18
Open unbleached waste	...– .16
Bleached thread waste (mfs.)	...– .12
Bleached thread waste (misc.)	...– .10
Colored thread waste	...– .08
Colored clips	...– .07

CONVERTED RAYON WASTE

Bleached tops	–$0.47½
Unbleached tops	...– .42½
Bleached noils	...– .16
Bleached garnetts	...– .13
Unbleached garnetts	...– .13
Colored garnetts	...– .10

Silk Waste

Kibizzo Kakai Grand XX	$0.85
Kibizzo Kakai Triple Extra	.92
Frison Grand Double	.90
Pierced Cocoons	1.12

Southern Mill Securities

(A. M. Law & Co., Spartanburg)

	Bid	Asked
Abbeville Cotton Mills	..	50
Anderson Cotton Mills	63	69
Arcade Cotton Mills	..	60
Arcadia Mills	..	225
Arcadia Mills, pfd.	91	96
Arkwright Mills	..	50
Augusta Factory, Ga.	..	20
Avondale Mills, Ala.	750	1000
Beaumont Mfg. Co.	200	275
Beaumont Mfg. Co. 7% pfd.	100	102
Belton Mills	..	25
Belton Mills, pfd.	..	75
Bibb Mfg. Co.	97	100
Bibb Mfg. Co. 6% pfd.	99	102
Brandon Corp., A	..	45
Brandon Corp., B	..	7
Brandon Corp., pfd.	..	80
Calhoun Mills	87	95
Chadwick-Hoskins Co. (par, $25)	9	11
Chesnee Mills	..	60
Chiquola Mfg. Co.	250	260
Chiquola Mfg. Co., pfd.	88	92
Clifton Mfg. Co.	97	99
Clinton Cotton Mills	225	250
Columbus Mfg. Co., Ga.	80	90
Cowpens Mills	..	30
D. E. Converse Co.	90	94
Dallas Mfg. Co., Ala.	..	50
Darlington Mfg. Co.	40	50
Drayton Mills	100	..
Dunean Mills	115	125
Dunean Mills, pfd.	95	100
Eagle & Phoenix Mills, Ga.	..	65
Easley Cotton Mills, pfd.	..	47
Enterprise Mfg. Co., Ga.	..	100
Fairforest Finishing Co., serial notes.	97	100
Florence Mills	45	50
Florence Mills, pfd.	97	100
Gaffney Mfg. Co.	..	25
Gainesville Cotton Mills, Ga.	130	150
Glenwood Mills	85	95
Gluck Mills	65	70
Gossett Mills	..	60
Graniteville Mfg. Co.	..	100
Greenwood Cotton Mills	400	..
Grendel Mills, pfd. (par, $50)	45	48
Hamrick Mills	..	90
Hartsville Cotton Mills	130	140
Hunter Mfg. & Com. Co., pfd.	79	83
Industrial Cotton Mills Co., pfd.	..	30
Inman Mills	110	120
Inman Mills, pfd.	100	..
Judson Mills, A, pfd.	97	99
Judson Mills, B, pfd.	95	98
King, John P. Mfg. Co., Ga.	80	90
Lancaster Cotton Mills	225	..
Laurens Cotton Mills	..	120
Limestone Cotton Mills	..	95
Lydia Cotton Mills, serial notes	95	100
Marion Mfg. Co., N.C.	..	110
Marlboro Mills	..	15
Mills Mill, pfd.	92	97
Mollohon Mfg. Co., pfd.	95	100
Monarch Mills	100	110
Musgrove Cotton Mills	..	30
Newberry Cotton Mills	100	105
Ninety-six Mills	400	..
Norris Cotton Mills	..	40
Orr Cotton Mills	..	60
Orr Cotton Mills, pfd.	..	83
Pacolet Mfg. Co.	..	125
Pacolet Mfg. Co., pfd.	92	96
Panola Cotton Mills, Class A, pfd. (par, $60)	55	60
Pickens Cotton Mills	105	115
Piedmont Mfg. Co.	95	100
Piedmont Print Works (no par)	13	17
Piedmont Print Works, pfd.	60	70
Poe, F. W. Mfg. Co.	19	25
Riverside & Dan River Mills	10¼	11¼
Riverside & Dan River Mills, 6% pfd.	71	76
Saxon Mills	..	65
Sibley Mfg. Co., Ga.	50	60
Southern Bleachery	16	20
Southern Bleachery, pfd.	..	80
Southern Bleachery, serial notes	95	100
Southern Franklin Process	18	22
Southern Franklin Process, pfd.	97	101
Southern Worsted Corp., pfd.	88	92
Spartan Mills	..	135
Spencer Corp., serial notes	95	100
Union-Buffalo Mills	..	45
Union-Buffalo Mills, 1st pfd.	80	83
Union-Buffalo Mills, 2nd pfd.	43	46
Victor-Monaghan Co.	60	65
Victor-Monaghan Co., pfd.	105	110
Wallace Mfg. Co.	..	105
Ware Shoals Mfg. Co.	125	135
Whitney Mfg. Co.	..	40
Woodside Cotton Mills Co.	..	35
Woodside Cotton Mills Co., pfd.	..	40
Yarns Corp. of America, gold bonds.	98	101

Textiles on N. Y. Exchanges

The following shows the movements of the leading textile stocks listed on the New York Stock Exchange and Curb for the week ended Sept. 10:

	High	Low	Last	Change
Adams Millis	26½	26½	26½	— ⅜
*American Thread, pfd.	3½	3½	3½	— ⅛
American Woolen	11⅛	11	11⅛	— 1⅛
American Woolen, pfd.	29⅞	28⅝	29	+ ⅛
*Assoc. Rayon, pfd.	5⅞	50⅜	51	....
Belding-Hemingway	4¼	4¼	4¼	+ ¼
Cannon Mills	23	22	23	+ 1
Century Ribbon	5¼	5	5¼	+ 1¼
Collins & Aikman	23½	21½	22⅝	+ 1
Consolidated Textile	1	⅞	⅞	....
Duplan Silk	19	15	18	+ 3
*Fabrics Finishing	3	2½	3	+ ¼
Gotham Hosiery	14⅜	11⅞	13½	+ 1¼
Industrial Rayon	86⅛	86	86½	+ 5
Kayser, Julius	26⅜	24¼	25⅝	+ 1⅜
Kendall, pfd.	68	68	68	—13
Mallinson	7	6¾	7	....
Mohawk Carpet	18½	16½	18½	+ ⅜
Munsingwear	39½	38⅛	39¼	+ 1⅛
Pacific Mills	22¼	22	22	— ⅜
*Pepperell	90	89	90	+ 4½
Real Silk Hosiery	49⅞	41¼	49⅞	+ 6⅛
*Tubize Chat B	7¼	7	7	— ⅛
United Piece Dye Works	29⅜	25	28¼	+ 6

*Listed on Curb.

Fall River Mill Stocks

(G. M. Haffards & Co., Fall River)

	Bid	Asked
Algonquin Printing Co.	310	..
Barnard Mfg. Co.	..	10
Berkshire (com.)	8	10
Berkshire (pfd.)	..	60
Bourne Mills	5	10
Border City Mfg. Co.	..	5
Charlton Mills	..	50
Cornell Mills	..	10
Davol Mills	..	5
Davis Mills	5	8
Flint Mills	18	..
King Philip Mills	..	..
Laurel Lake Mills (com.)	..	8
Laurel Lake Mills (pfd.)	3	..
Lincoln Mfg. Co.	..	10
Luther Mfg. Co.	80	..
Merchants Mfg. Co.	27	..
Narragansett Mills	..	10
Pilgrim Mills	..	60
Richard Borden Mfg. Co.	..	3
Sagamore Mfg. Co.	..	60
Shove Mills	..	6
Stafford Mills	..	1
Stevens Mfg. Co.	28	..
Union Cotton Mfg. Co.	24	..
Weetamoe Mills	..	1

N. Carolina Mill Stocks

(R. S. Dickson & Co., Charlotte, N. C.)

	Bid	Asked
Acme Spinning Co.	60	75
American Yarn & Processing Co.	..	71
Chadwick-Hoskins Co. (Par. $25)	7	10
Chadwick-Hoskins Co., 8%, pfd.	93	98
China Grove Cotton Mills	87	95
Climax Spinning Co.	54	65
Clover Mills	..	26
Converse D. E. Co.	84	91
Crescent Spinning Co.	50	61
Dixon Mills	90	100
Durham Hosiery, 6%, pfd.	..	35
Eagle Yarn Mills	54	65
Efird Mfg. Co.	64	80
Erwin Cotton Mills	..	115
Erwin Cotton Mills Co., 6%, pfd.	85	96
Flint Mfg. Co.	..	85
Flint Mfg. Co., 7%, pfd	90	98
Globe Yarn Mills (N. C.)	..	18
Gray Mfg. Co.	..	75
Hanes, P. H. Knitting Co.	6	10
Hanes, P. H. Knitting Co., 7%, pfd.	..	98
Henrietta Mills, 7%, pfd	40	55
Imperial Yarn Mills	..	60
Linford Mills	60	71
Locke Cotton Mills Co.	40	55
Majestic Mfg. Co.	100	135
Mansfield Mills	..	65
Mooresville Cotton Mills	3	6½
Mooresville Cotton Mills, 7%, prior	..	81
Myers Mills	..	66
Myrtle Mills	..	51
National Yarn Mill	49	60
Perfection Spinning Co.	53	66
Ranlo Mfg. Co.	..	114
Ranlo Mfg. Co., 7%, pfd.	..	97
Roanoke Mills	50	..
Roanoke Mills, 1st pfd., 7½%	78	92
Roanoke Mills, 2nd pfd., 8%	76	94
Rosemary Mfg. Co., pfd., 7½%	93	..
Rowan Cotton Mills Co.	64	78
Seminole Cotton Mills Co.	..	75
Sterling Spinning Co.	60	75
Stowe Spinning Co.	54	66
Victory Yarn Mills Co.	35	50
Ware Shoals Mfg. Co.	110	125
Ware Shoals Mfg. Co., 7%, pfd.	91	98
Winget Yarn Mills Co.	36	50
Wiscassett Mills Co.	155	180

New England Textile Stocks

Quotations at "Public Sale" are based on last sales at Boston Public Auctions and Boston Stock Exchange. Bid and Asked prices are latest quotations of dealers.

	Public Sale	Bid	Asked
Am. Mfg. pfd.	60	60	64
Amoskeag	11	...	...
Arlington	24	23	25
Associated Textile	36½	34	37
Bates	63	62	66
Berkshire Associates, com.	9	8	10
Berkshire Associates, pfd.	55	55	57
Bigelow-Sanford, com.	50½	...	...
Boott Mills	120½	...	114
Edwards	80¾	64	67
Esmond, pfd.	102	100	102
Farr Alpaca	69¾	67	70
Hamilton Woolen	40	38	40
Hill	18	14	18
Indian Orchard	20½	20	25
Ludlow	136	136	140
Merrimack, com.	50½	44	50
Nashua, com.	22	18	23
Nashua, pfd.	66	65	67
Naumkeag	88	84	87
Newmarket	25½	18	...
Otis	49½	42	48
Pacific	22	...	...
Pepperell	90	88	90
Plymouth Cordage	73½	72	74
York	8¼	6½	7½

Textile Calendar

The Textile Forum, N.A.C.M., General Meeting, Boston (Mass.) Chamber of Commerce, Sept. 16, 1930.

Paterson Silk Institute Discussion Meeting, Chamber of Commerce, Paterson, N. J., Sept. 18, 1930.

Western District, National Knitted Outerwear Manufacturers Association, Annual Meeting, Hotel Shroeder, Milwaukee, Wis., Sept. 23, 1930.

Textile Operating Executives of Georgia, Fall Meeting, Georgia School of Technology, Atlanta, Ga., Sept. 19, 1930.

Worsted Yarn Spinners' Annual Outing, Manufacturers' Country Club, Oreland, Pa., Sept. 24, 1930.

Spinners' Division, Southern Textile Association, regular meeting, Charlotte, N. C., Sept. 26, 1930.

Carolina Yarn Association, Golf tournament, Sedgefield, near Greensboro, N. C., Sept. 26 and 27, 1930.

National Safety Congress, Textile Section, Annual Meeting, William Penn Hotel, Pittsburgh, Pa., Sept. 30-Oct. 1, 1930.

Master Mechanics' Division, Southern Textile Association, Regular meeting, Greensboro, N. C., Oct. 3, 1930.

National Association of Cotton Manufacturers, Annual Meeting, Poland Springs, Me., Oct. 10-11, 1930.

Ninth Southern Textile Exposition, Textile Hall, Greenville, S. C., Oct. 20-25, 1930.

Textile Division, A.S.M.E., National Meeting, Poinsett Hotel, Greenville, S. C., Oct. 22, 1930.

Southern Textile Association, Semi-Annual Meeting, Poinsett Hotel, Greenville, S. C., Oct. 23, 1930.

United States Institute for Textile Research, First Annual Meeting, New York City, Nov. 6, 1930.

The Textile Forum, N.A.C.M., overseers of carding, Boston (Mass.) Chamber of Commerce, Nov. 18, 1930.

Ninth National Exposition of Power and Mechanical Engineering, Grand Central Palace, New York City, Dec. 1 to 6, 1930.

The Textile Forum, N.A.C.M., overseers of spinning, Boston (Mass.) Chamber of Commerce, Dec. 9, 1930.

The Textile Forum, N.A.C.M., master mechanics, Boston (Mass.) Chamber of Commerce, Jan. 13, 1931.

Plan Recreation as Important Part Of N.A.C.M. Convention, Oct. 10-11

THE golf championship of the cotton industry will be decided at the annual meeting of the National Association of Cotton Manufacturers at Poland Springs, Me., Oct. 10 and 11. Representatives of the mills, of allied industries and their guests will engage in golf and other sports during the week-end which will be devoted to a combination of outing and business.

The convention will be held at the Poland Spring House. There is a comparatively small number of single rooms and members wishing such have been asked to make immediate reservation. There is, however, an ample number of double rooms and suites.

The location at Poland Spring is easily accessible by automobile highways. A card giving routes from various parts of New England and New York is issued by the Poland Spring House. From Boston the distance by road is 148.1 miles running through Newburyport, Portsmouth, Biddeford, Portland, and Gray.

In the golf tournament there will be prizes for the best gross score, the best net score and for each eagle. There will also be an award for the best score turned in by the women guests although they will not participate in the tournament for the men. Tennis, croquet, obstacle golf, horseshoe pitching and pool and bagatelle will be among the other items on the program of recreation.

First and second prizes will be given in the horseshoe pitching contests. Stephen Crowley, assistant general manager of the Lewiston (Me.) Bleachery, who is chairman of the sports committee will be in charge of the horseshoe pitching events. The golf tournament will be conducted by F. E. Banfield, Jr., agent, Saco-Lowell Shops, Biddeford, Me., William C. Summersby, agent, Hill Mfg. Co., Augusta, Me., and the golf professional and his assistant at the Poland Springs House. Entries in the golf tournament will be made upon arrival at the Poland Springs House.

Members of the program committee are: Philip Dana, treasurer, Dana Warp Mills, Westbrooke, Me.; Nathaniel F. Ayer, treasurer, Nyanza Mills, Boston; F. E. Banfield, Jr., agent, Saco-Lowell Shops, Biddeford, Me.; Stephen H. Crowley, assistant general manager, Lewiston Bleachery & Dye Works, Lewiston, Me.; George H. Estes, assistant agent, Continental Mills, Lewiston, Me.; Vernon C. Faunce, superintendent, Bates Mfg. Co., Lewiston, Me.; Henry C. Harden, Dwight Mfg. Co., Somersworth, N. H.; John T. Kirk, superintendent, Nashawena Mill, New Bedford; Leonard Kleeb, Jr., Pepperell Mfg. Co., Fall River; W. K. Sanborn, American Net & Twine Co., West Kennebunk, Me., George E. Spofford, treasurer, Hill Mfg. Co., Augusta, Me., Dexter Stevens, president, Manville-Jenckes Co., Pawtucket; W. C. Summersby, agent, Hill Mfg. Co., William E. Winchester, Deering, Milliken & Co., New York.

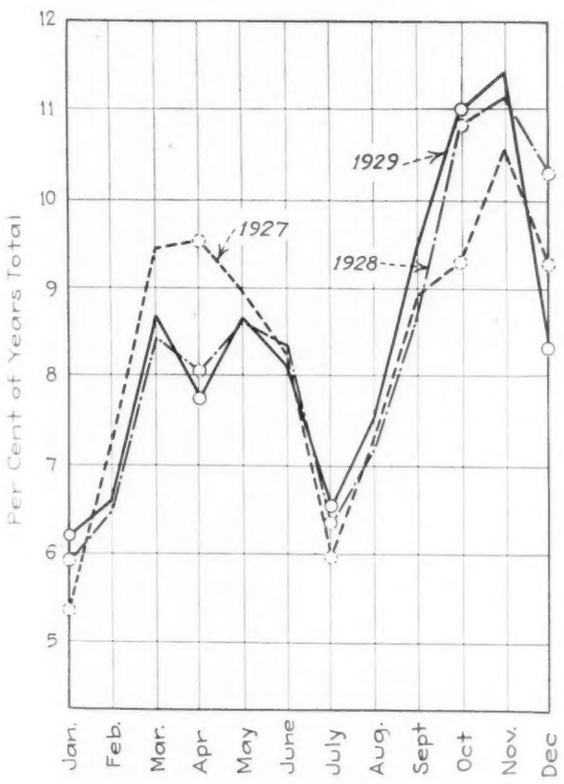
N.A.C.M. Textile Forum Opens Its Season Sept. 16

The Textile Forum, conducted by the National Association of Cotton Manufacturers for discussions by mill men of problems they encounter in their work, will open Tuesday, Sept. 16, for a series of meetings in the Boston Chamber of Commerce.

Agents, managers and superintendents of mills in New England, New York and Pennsylvania will discuss what is new in the industry and how to meet changing conditions. The meeting will start at 10:30 a.m. and will continue through the day with luncheon at noon.

Last year representatives of 87 mills attended the Forum and indications are that this year the attendance will be even larger. Meeting dates have been arranged as follows: Overseers of carding, Nov. 18; overseers of spinning, Dec. 9; master mechanics, Jan. 13; overseers of warp preparation and weavers, Feb. 10; overseers of dyeing, bleaching and cloth room, Mar. 10. No session of the Forum is planned for October as on Oct. 10 and 11 the annual meeting of the parent association will be held at Poland Springs, Me.

Details of the Forum are in charge of a steering committee representing other textile associations and includes: Chairman Henry A. Newton, superintendent, Pacific Mills, Dover, N. H., representing The Textile Club; John F. Reardon, agent, Grosvenor-Dale Co. North Grosvenordale, Conn., representing the Southern New England Textile Club; William Smith, principal, New Bedford Textile School, representing The Textile Associates; President Lincoln Baylies and Secretary Russell T. Fisher, representing National Association of Cotton Manufacturers.



Monthly sales of women's full-fashioned hosiery to the retail trade as compiled and charted by the Textile Machine Works.

Hosiery Mills Sales Average Low Points in January and July

TEXTILE Machine Works, Reading, Pa., recently sent out an inquiry to full-fashioned stocking manufacturers selling to the retail trade to find out the distribution of their sales by months of the year. The material has been averaged and charted for three years and shows the months of January and July-August to be the low months of the year while the peak is at October-November.

The figures for each month in percentage of the year's total sales follow:

	1927	1928	1929
January	5.33	5.88	6.20
February	7.23	6.43	6.48
March	9.41	8.41	8.65
April	9.51	8.03	7.77
May	8.95	8.61	8.63
June	8.22	8.30	8.15
July	5.97	6.17	6.26
August	7.34	7.20	7.56
September	8.92	8.71	9.50
October	9.32	10.83	10.93
November	10.48	11.18	11.44
December	9.32	10.25	8.43
	100%	100%	100%
1st 6 months	48.65	45.66	45.88
2nd 6 months	51.35	54.34	54.12

Lowest and highest percentage reported by Mills:

Low...	2.0% Jan.	3.0% Jan.	3.11% Feb.
High...	14.3% Nov.	15.% Nov.	14.8 % Nov.

Duplan Devises New Means for Sure Identification of Fabrics

Patent has been applied for by the Duplan Silk Corp. on a device for the protection of their DuRay fabrics against substitutes. It secures and seals its quality-recording-insignia to all piece goods of DuRay fabrics. It marks the first appearance of a combination indentification mark on rayon piece goods under the provisions of the recently-established Viscose Co. quality-control plan for Crown brand yarn. This identification label is not destroyed until the last quarter yard of a piece of the fabric is sold.

The Duplan device is described as follows: The end of a piece of goods to be rolled on the tube from which the merchandise is sold is partially split. This loose end of the fabric is folded over so that it extends beyond the edge of the tube. The loose end is sealed to the tube with paper band upon which appear the insignias of the Duplan Silk Corp.'s DuRay fabrics and the Viscose Co.'s Crown brand rayon yarn. The end of the fabric which hangs beyond the seal bears the printed insignia of the Duplan Silk Corporation, which further establishes the identity of the cloth.

First example of operation of Viscose Co.'s quality control plan in woven merchandise. The Duplan Silk Corp. has applied for a patent on the device pictured above.

Russia Plans 16 Rayon Plants is Report

It is reported from Russia that the Soviet Government has begun construction of three of sixteen proposed rayon plants that are to be built at a total cost of 290,000,000 rubles. Eleven plants will be in operation according to plans within three years, the first at Leningrad next summer, with a daily output of 4,500 kilograms. The Moscow plant, with an 8,000-kilogram daily capacity, will follow. Contracts were awarded last fall to Oscar Kohorn & Co. of Germany, chemists, textile engineers and rayon machinery manufacturers, for the building of two plants. There already are two plants in Russia making yarn by the viscose process.

McIntosh Mills Open Philadelphia Office

McIntosh Mills, Newnan, Ga., have opened sales offices in Drexel Bldg., Fifth & Chestnut Sts., Philadelphia, where they will be represented by R. B. Hubbard, formerly secretary and treasurer, and D. T. Manget, Jr. Mr. Hubbard resigned from those offices upon locating in Philadelphia and his son, R. B. Hubbard, Jr., was elected secretary of the mills. T. G. Farmer, president, has been elected treasurer, the other office held by Mr. Hubbard, Sr. The mill has a wide reputation for colored weaving yarns in counts from 20s to 30s. Associated with McIntosh Mills in this office are Habersham (Ga.) Mills, spinners of white weaving yarns, 24s to 30s and Grantville (Ga.) Hosiery Mills, spinners of colored knitting yarns up to 20s, both of which will sell their yarns through Messrs. Hubbard and Manget at the Philadelphia sales office.

Carolina Yarn Association to Hold Golf Tournament

The Carolina Yarn Association, composed of yarn representatives, will hold a golf tournament on Sept. 26 and 27 at Sedgefield near Greensboro, N. C. The yarn men will have as their guests on this occasion the knitters and weavers of North and South Carolina and Virginia.

Joins Cannon Mills Sales Force

C. H. Fenn has become associated with Cannon Mills, Inc., Public Ledger Bldg., 6th & Chestnut Sts., Philadelphia and will assist in covering the local trade for the sale of their line of cotton yarns:

Eastern Carolina Division, S.T.A. to Meet Oct. 17.

The Eastern Carolina Division of the Southern Textile Association will hold a regular meeting in Durham, N. C., on Friday, Oct. 17. N. B. Hill, chairman, will preside.

Award Textile Scholarships

At a meeting in Boston on Thursday of the board of trustees of the Massachusetts Charitable Mechanical Association, twelve scholarships were awarded for the coming year to the three textile schools of Massachusetts.

Dyers to Hold Family Party at Warwick, R. I.

The National Association of Textile Dyers and Finishers will hold a family party at the Warwick Club, Warwick, R. I., on Sept. 21.

Manequin Parade Demonstrates New Pacific Fabrics

Pacific Mills launched its new season's wash goods lines on Sept. 9, with a manequin showing of about 80 original models. These were exclusive models based on style thoughts from the August Paris openings and created in the Pacific Experimental Workshop.

The models shown were in definitely established price brackets ranging from $7.50 to $33.00 per doz. The sponsors believe that this was a demonstration of how the cutter may meet a more elaborate mode and yet keep within present price divisions.

The garment collection consisted of women's, junior misses' and children's dresses, suits, sports costumes, pajamas and smocks made from new lines.

Boger & Crawford Spinning Finest Counts

Boger & Crawford, Philadelphia and Lincolnton, N. C., are now spinning cotton yarns in counts fine as 190s and 200s, an achievement in spinning in this country, upon a commercial scale. This concern entered the fine count field by spinning 140s and later 160s. Recently they raised the limit to 180s and this has now been further advanced with spinning up to 200s. Formerly bulk of such counts were imported and the announcement for that reason marks a step forward in American spinning.

Propose Futures Market for Long Staple Cotton

Early action on the proposal for the establishment of a long staple cotton futures market is indicated in the announcement by the Memphis (Tenn.) Cotton Exchange that a poll of its membership apparently favors the plan. Exchange officers said that a meeting will be held, and a steering committee appointed. Legal phases of the plan involve the question whether the market can be brought within the provisions of Federal cotton futures act.

Western District Outerwear Meeting on Sept. 23

MILWAUKEE, WIS. — Tuesday, Sept. 23, has been selected as the meeting date of the thirteenth annual meeting of the National Knitted Outerwear Manufacturers Association, Western District, to be held at the Hotel Schroeder in this city. The meeting will be a one-day affair opening with a luncheon at noon and closing with a banquet in the evening.

Opelika and Strickland Join Cotton-Textile Institute

The Opelika (Ala.) Mfg. Co., with 19,584 spindles in place, and the Strickland Cotton Mills, Valdosta, Ga., with 13,104 spindles in place, have become members of The Cotton-Textile Institute, according to an announcement made by that organization this week.

Support Indicated to Hosiery Exchange Plan

Enthusiastic support of plan to form new full-fashioned hosiery exchange was given by manufacturers in Reading, Philadelphia and New York at meetings this week in those cities. The Reading meeting held Wednesday was attended by practically all full-fashioned manufacturers in that section. J. E. Barbey, vice-president and general manager, Vanity Fair Silk Mills, presided. Philadelphia group met at Manufacturers Club Thursday, G. C. Aberle of H. C. Aberle Co. acting as chairman. More than 60 manufacturers listened to Julian Armstrong of Chicago, who has been formulating plans for the new organization. He said that new body would establish uniform trade practices, manufacturing standards and function as clearing house for the trade.

Wool Top Exchange Staff Appointments

The first three appointments to the official staff of the new Wool Top Exchange, which is to be opened later this year, have been made with the selection of Alston H. Garside as executive secretary, Fred F. Kuhlmann as recording secretary, and W. Brewster Southworth as assistant secretary. Mr. Garside will spend part of his time in New York and part in Boston. Mr. Kuhlmann will be stationed in New York, and Mr. Southworth will be stationed in Boston, where he will have charge of the Boston office of the Exchange. Mr. Garside will continue as economist of the New York Cotton Exchange, as well as acting as executive secretary of the Wool Top Exchange. Mr. Kuhlmann has been secretary of the New York Cotton Exchange since Dec. 1, 1929. Mr. Southworth has been manager of the Boston office of F. B. Keech & Co.

Notables to Discuss Silk Institute Project

PATERSON, N. J.—Arrangements are being completed for the meeting Sept. 18 at the Alexander Hamilton Hotel, to consider the silk institute project previously described in these columns. The meeting is being held by the Paterson Chamber of Commerce. The list of speakers includes: A. D. Whiteside, president of the Wool Institute; Paolino E. Gerli, E. Gerli & Co.; Lew Hahn, president of the Hahn Department Stores, Inc.; W. E. Shinn, Textile Technologist of the U. S. Bureau of Standards, Washington; M. Mosessohn, executive chairman, United Women's Wear League of America; Alexander D. Walker, of A. D. Walker & Co.; C. E. Rosemassler, Saquoit Silk Mfg. Co.; Nat W. Doorly, advertising manager, Fairchild Publications; Forrest S. Dayton, president of the Silk & Rayon Credit Association; Dr. Emil Roetheli, United Piece Dye Works; Harold Cruzon, Warner Woven Label Co.; James A. Wiley, Associated Dyeing & Printing Corp.; Kneeland L. Green, Stehli Silk Corp.; J. Shields, Chenango Textile Co.; R. Devere Hope, vice-president of the Associated Dyeing & Printing Corp.; Irving A. Post, National Silk Dyeing Co.

Worsted Spinners Arranging Annual Outing

Ernest R. Townson, chairman of the field day committee for the woolen and worsted spinners' outing to be held at Manufacturers' Country Club, Oreland, Pa., on Sept. 24, has announced names of the various committees which will supervise the day's activities. William H. Richardson will head the dinner committee and H. E. Wasson, the entertainment, being assisted by Joseph E. Duval and Louis Bagnall. John J. Hosey and John Halford are on the baseball committee, while Henry Legge heads group having golf in charge. Mr. Legge has as his assistants, Gordon Bottomley, Howard Bacon, S. R. Stager, J. B. Harrington and G. H. Atherholt. New England committee consists of Frank Payon, M. Guerin, D. O'Brien, C. B. Rockwell, Edward Legge, Eugene L. Jalbert and J. B. Rousseau. Transportation committee members are R. Lehman, Jr., F. Krecker, Charles McAlaine and C. P. Murphy.

Business News

Feculose Appoints New England Distributor

The Feculose Co. of America, Ayer, Mass., manufacturers of compounds for sizing and finishing yarns and fabrics, announce the appointment of George Mann & Co., Inc., Providence, R. I., and Lowell, Mass., as sole New England distributors.

R. P. Tarbell Joins Robt. E. Kinkhead, Inc.

Ray P. Tarbell has recently become a member of the firm of Robert E. Kinkead, Inc., consulting welding engineers, Cleveland, Ohio. He was formerly Cleveland district sales manager of The Lincoln Electric Co., manufacturers of "Stable-Arc" welders and "Linc-Weld" motors.

As vice-president and secretary, Mr. Tarbell will aid Robert E. Kinkead, well known authority on welding procedure and control, in his executive duties as president of the firm which bears his name.

Container Corp. Buys Gibraltar Paper Co.

Container Corp. of America, producer of paperboard shipping containers, recently announced the purchase of the assets and business of the Gibraltar Corrugated Paper Co., Inc., with plants at North Bergen, N. J.

The Container corporation announcement states that the present Sefton division leased plant in Brooklyn will be merged with Gibraltar and that the paperboard supply of the new division will be manufactured in the Philadelphia plant.

Textile Banking Co. in New Quarters

The Textile Banking Co. has recently moved to new and enlarged offices in the New York Life Insurance Building, 51 Madison Ave., New York. The new quarters occupy the street floor and mezzanine on the 27th St. corner of the building.

The move was necessitated by the increased volume of business, according to officials. With present office facilities the company is equipped to handle a 50% greater volume.

The Textile Banking Co. was formed in the fall of 1919 and the volume for the year 1920 amounted to $40,000,000. At the present time, the monthly business is running at a yearly rate of $100,000,000.

Moves Cleveland Office

The Cleveland office of the Chicago Bridge & Iron Works was moved on Sept. 15 to the Midland Bank Building. G. S. Sangdahl, district sales manager, has been in charge of this office since it was opened several years ago.

Charlotte Office of Lockwood Greene Consolidated with Spartanburg

The Charlotte (N. C.) office of Lockwood Greene Engineers, Inc., which was established about ten years ago, with J. Norman Pease as manager, assisted by J. T. Wardlaw, has been consolidated with the Spartanburg office.

Mr. Pease has been promoted to an executive position in the New York offices of Lockwood Greene, and is moving his family to that city in a few days.

Mr. Wardlaw, who has been assistant manager at Charlotte, goes to Spartanburg as assistant to R. E. Barnwell, Spartanburg manager who is also a vice-president of the company.

G. E. Vapor Lamp Co. Moves Southern Office to Atlanta

The General Electric Vapor Lamp Co., formerly Cooper-Hewitt Electric Co., Hoboken, N. J., has closed its Knoxville, Tenn., office as of Sept. 1 and opened an Atlanta office with larger quarters. This latter office is in the Red Rock Building with Frank E. Keener in charge. Mr. Keener was formerly in charge at Knoxville. John R. Baer is now associated with him.

Success in placing Cooper-Hewitt systems of lighting in textile mills is one of the reasons for the move as the organization finds Atlanta more centrally located for that part of the industry they seek to reach. This office will also market the Uviarc quartz lamp equipment for fading tests in industrial laboratories, the neon glow lamp, the Kon-nec-tor or mercury switch and the hot cathode neon tube lamp.

Son Takes Over Frank Bailey Business

Ben Bailey, son of Frank Bailey, head of the firm of this name located at Cedar Brook, N. J., announces that following the death of his father Aug. 11, he has taken over the management of the firm, which will be continued by him along the same lines that his father followed for more than 37 years. Frank Bailey was widely known to more than 800 textile concerns and dye-houses with which he had been doing business, in many instances, during this entire period, and the son, Ben Bailey, is also extensively known. The firm builds hot and cold air drying machines for yarns, sells sticks and other accessories for dye-houses. Frank Bailey was born in Hanging Heaton, near Dewsbury, Yorkshire, England, coming to United States in 1880 when he was employed by John Bromley & Sons, later establishing the business with which he was associated at the time of his death.